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THE GENDER 'EDUCATION TRANSITION': WHAT IT MIGHT MEAN FOR THE LABOUR MARKET

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Abstract

While overall tertiary education participation has been rising, some groups are lagging. Men, and particularly Maori and Pacific men, are increasingly under represented in many education institutions, especially at higher levels of education. For example, in 1994 in the under 30 age group and when foreign students are excluded there were 13% more women than men enrolled in degree courses. By 2004 this had risen to 36%. For Maori undertaking degrees, the difference had risen from 21% to 79% in 2004, while for Pacific students the figures have gone from 27% to 52%. The cohorts that are part of this tertiary 'education transition' are now a key part of the population that are forming couples or deciding to live on their own, establishing their careers and deciding whether to have children. Some of the possible implications of this 'education transition' for the labour market are explored.

Introduction

In the 1990s, New Zealand experienced a gender transition in tertiary educational enrolment within New Zealand educational providers. For the first time in our history women began participating in tertiary education at a significantly higher rate than men (Callister *et al* 2006, Newell and Perry 2006). However, this transition is not unique to New Zealand with similar trends occurring, at differing rates, in most industrialised countries (Buchmann and DiPrete 2006a&b).

This paper begins by setting out the magnitude of the changes in education for women and men within New Zealand. First, there is brief outline of overall long-term trends in tertiary education participation. The paper then focuses on changes in both enrolments and completions since the mid 1990s, but with the main period studied 1999 through to 2004.³ The initial data used in this paper are drawn from a new dataset based on students created by the Ministry of Education. In an earlier paper on this issue, as well as in the second part of this paper, a different source of enrolment data is used (Callister *et al*

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³ This was the latest available data when this paper was being prepared.

2006).⁴ These are enrolment data that can result in some double counting where people are enrolled at more than one institution.

The paper then considers how these changes might have an impact, either directly or indirectly, on the labour market. We do so by focussing primarily on two professional qualifications: school teaching and the broad area of health related qualifications, but especially doctors.

Census data helps set the scene. Summarising census trends from 1981 to 2001, Newell and Perry (2006) show that the proportion of women over 15 with a tertiary degree qualification increased from 2.5% in 1981 to 12.4% compared with an increase from 5.1% to 12.4% for men. Within this overall picture they show a major shift between 1991 and 1996 from male to female led educational attainment amongst younger age groups in the transition from school to work. Between 1981 and 1986 6.2% of males aged 20 to 24 and 5.4% of male residents had gained a degree. Between 1991 and 1996 9.9% of males aged 20 to 24 and 12.4% of females gained a degree qualification. By the 1996 to 2001 period, the margins between male and female attainment levels diverged further with 11% of males and 16.6% of females gaining a degree qualification. The divergence shows up clearly when a cohort approach is taken (see Appendix). The census data are consistent with Ministry of Education administrative data for the 1996 to 2001 which that show that 25,700 degree completions by females and 16,000 by males aged 20 to 24 years of age. The margin between male and female non-degree post-secondary qualification attainment is smaller with 15.8% of females versus 15.1% of males aged 20 to 24 gaining a non-degree post-secondary qualifications between 1996 and 2001 compared with 29.5% of men and 24.4% of women between 1986 and 2001. Newell and Perry show that the margins between male and female educational attainment are larger for residents of Maori and Pacific ethnicity than others.

While this paper focuses on trends in educational enrolment and completions in New Zealand, overall levels of educational qualifications, and the numbers of qualified men versus women, in each country is also strongly influenced by both inward and outward migration. New Zealand stands out internationally in terms of the proportion of the population that were born overseas as well as the proportion of New Zealanders living overseas (Dumont and Lemaître, 2004). Newell and Perry (2006) make preliminary estimates for New Zealand resident net outflow rates between 1996 and 2001 of 10-20% over a wide range of New Zealand a non-degree post-secondary qualification and a net loss of those with a degree qualification of the order of 15-20% concentrated amongst those aged 20 to 29 years.

Given that the most skilled and educated tend to be the most mobile internationally, ideally the balance of well-educated New Zealanders leaving, well-educated migrants arriving in New Zealand (the so-called 'brain drain'), and foreign students remaining in New Zealand after they have completed their studies, should be considered when determining what New Zealand's future labour force might look like. While this is an ideal, the complexities of determining overall educational trends, particularly when

⁴ In fact, the data quoted in the abstract are from this earlier dataset.

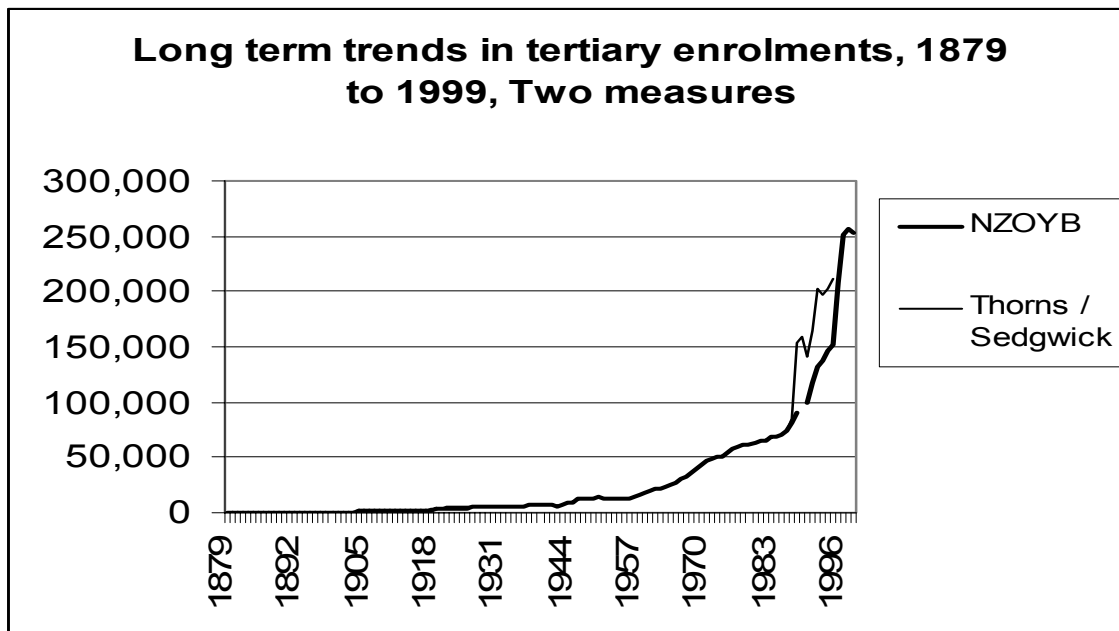
gender is also considered, are beyond the scope of this paper. Instead, only trends within New Zealand tertiary education institutions are considered.

While an important dimension to the gender changes, ethnicity is not directly considered in this paper. Finally, apart from briefly considering how the gender of teachers might affect the outcomes for students, the paper does not attempt to analyse why the gender-based changes in educational participation have taken place. Both these areas await research in a New Zealand context.

Historic education trends

Figure 1 shows the number of women and men taking part in tertiary education in each year from 1879 through to 1999. It indicates a dramatic increase in enrolments post World War II, with particularly strong growth since the 1980s.

Figure 1



Source: <http://www.stats.govt.nz/tables/ltds/ltds-social-indicators.htm>

Ministry of Education data indicate that the growth continued since 1999. If foreign students are included then the number of students enrolled increased from 308,139 in 1999 to reach 505,408 in 2004.

US research shows that in the late 1890s through to the turn of that century there were times where there were slightly more women than men enrolled in tertiary education (Goldin and Katz, 2006).⁵ The authors note that the peak of male dominance in tertiary educational enrolments in the US was post WW2 in the 1960s and 1970s. While similar

⁵ However, in this period more men than women graduated.

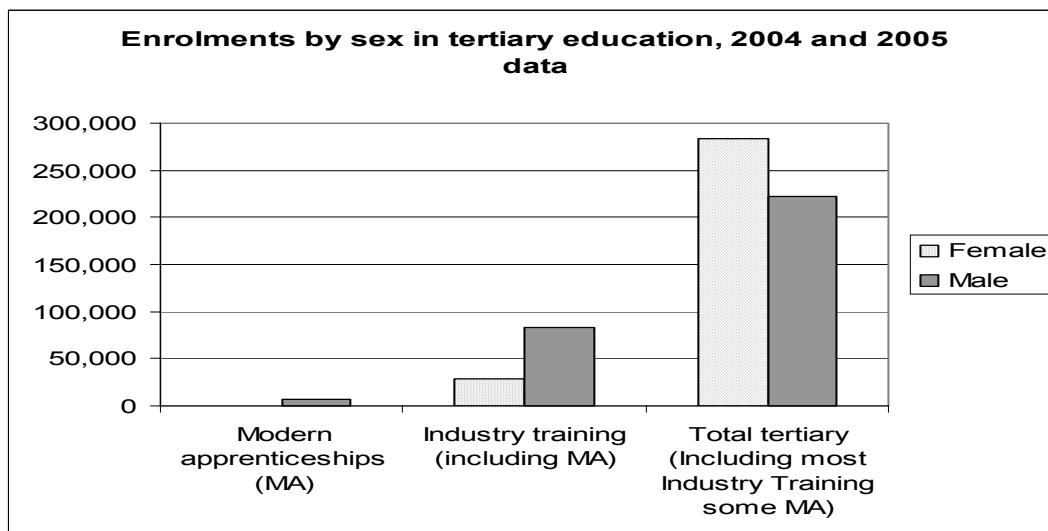
data have not been produced in New Zealand, case studies indicate a comparable pattern in New Zealand. For example, in terms of enrolments at Victoria University, Barrowman (1999) shows that in 1920 women made up 42% of enrolments but this had declined to around 25% in the 1950s and 1960s.

Focussing on a much shorter time period, using Census data Newell and Perry (2006) demonstrate that from 1981 to 2001 the proportion of New Zealand residents aged 15 years or older with no educational qualification halved from 55% to 28%. While part of this decrease in the number of New Zealanders without educational qualifications is due to increases in the number of people with school qualifications, reflecting the pattern shown in Figure 1, much of the growth in qualifications has been through an increasing number of New Zealanders gaining tertiary qualifications.

What types of education are we considering?

All formal educational courses offered within polytechnics, wananga, universities, colleges of education, universities and private providers are captured in the Ministry of Education tertiary data. There has been much focus on the gender imbalance in Modern Apprenticeships, which is strongly in favour of men. Some people undertaking apprenticeships may not undertake any formal study within a tertiary education provider. But most people undertaking some form of industry-based training will undertake a formal course and therefore will be counted in the official data. To give some idea of the relative size of Modern Apprenticeships, overall industry based training and the total education sector, Figure 2 shows the gender balance in industry training and in wider education in 2004. It indicates that Modern Apprenticeships, while important, are a very small part of the education sector.

Figure 2



Recent educational trends

Not all enrolments end as qualifications, and in fact Ministry of Education data indicate that women are more likely than men to complete their tertiary studies. For instance of those enrolled in 2000, women had a qualification completion rate after five years of 43% against men at 35%. There are also some ethnic differences in completion rates with lower rates for Maori and Pacific students. Nevertheless, enrolment data provide an initial guide to how educational trends are emerging.

Table 1 shows end of year data for enrolments from 1999 to 2004 and exclude foreign students. The gender transition had already taken place in the mid 1990s and women as a percentage of all students' in this time period moves in a narrow band between a low of 56% and a high of 58%.

Table 1: Students enrolled in tertiary education from 1999 to 2004, all age groups but excluding foreign students

	1999	2000	2001	2002	2003	2004
Female	165,305	177,321	196,286	223,869	243,247	258,587
Male	130,899	138,041	149,446	162,401	184,384	196,366
Total	296,204	315,362	345,732	386,270	427,631	454,953
Women as %	56	56	57	58	57	57

Source: Ministry of Education (2006)

The differences between women and men also show up when age standardised participation rates are calculated. For example in 2004 the participation rate for women was 16.2% while for men it was 12.4%.

In recent years, one of the growth areas in tertiary education has been amongst older students. Part of this represents a 'catch-up' by those who had no formal tertiary qualifications, a component represents people re-training within a similar level of qualifications, while another group are those who already had a tertiary qualification gaining further advanced qualifications, perhaps an honours degree or some other postgraduate study. In recent years in the older age groups, while male enrolments have increased strongly, female enrolments have greatly outnumbered males. To some degree this is not surprising given that historically women were less likely to participate in tertiary education when they were young. In addition, many women have taken time out of paid work while raising children and upgrade skills before returning to the workforce. This is indicated by data that shows in 2004 that 74% of those who were enrolled in tertiary education, and had not been in the workforce prior to this enrolment, were women.

Table 2 show enrolments by sex and age in the period 1999 to 2004.⁶ Only in the under 18 age group were there more men than women in each year but total student numbers under 18 are relatively low compared with other age groups.⁷

Table 2: Male and female tertiary student enrolments by age, 1999-2004

		1999	2000	2001	2002	2003	2004
under 18	Female	6,621	8,318	8,734	7,993	8,100	9,067
	Male	7,676	8,270	9,283	8,077	9,305	10,436
18-24	Female	65,163	66,181	70,677	74,472	77,286	80,162
	Male	59,830	60,224	62,764	63,980	66,679	68,938
25-39	Female	58,321	62,775	70,324	81,126	85,283	91,364
	Male	43,058	45,806	49,852	55,401	59,580	63,638
40+	Female	35,149	40,004	46,544	60,276	68,499	77,994
	Male	20,313	23,198	27,544	34,942	44,682	53,354

Table 3 shows female students as a percentage of total enrolments in each broad age group. As already noted, only in the under 18 age groups were there more men than women enrolled. In the 18-24 and 25-39 age groups there was a small rise in the proportion of women students, but amongst those aged 40 or older a slight decline between 1999 and 2004.

Table 3: Female tertiary student enrolments as a percentage of total enrolments, by age 1999-2004

	1999	2000	2001	2002	2003	2004
under 18	46	50	48	50	47	46
18-24	52	52	53	54	54	54
25-39	58	58	59	59	59	59
40+	63	63	63	63	61	59
Total	56	56	57	58	57	57

Table 4 shifts the focus to completions and, as already discussed, indicates female completions are higher than those for men. In recent years the women have formed between 59% and 62% of those completing tertiary qualifications.

⁶ Note this that all subsequent tables exclude foreign students.

⁷ In part this is likely to reflect overall sex ratios with there being more men than women in this younger age group.

Table 4: Male and female tertiary student qualification completions and female completions as a percentage of total completions, 2004

	1999	2000	2001	2002	2003	2004
Female	33,886	41,368	45,731	55,397	59,146	76,682
Male	22,406	27,414	31,269	34,904	36,997	51,451
Total	56,292	68,782	77,000	90,301	96,143	128,133
%	60	60	59	61	62	60

Table 5 shows that in 2004 there was only one area of study where there were more completions by males, that is at the doctorate level in the 25-39 age group. The highest difference was completions by women aged over 40 who had undertaken study at a bachelors level (75% of graduates in this age group in 2004 were women).

Table 5: Female tertiary student qualification completions as a percentage of total completions, by age 2004 (areas where there were more men are in bold italics)*

	Level 1-3 Certificate	Level 4 Certificate	Level 5-6 Diploma	Level 7 Bachelors	Level 8 Honours/ Postgrad Cert/Dip	Level 9 Masters	Level 10 Doctorate	Total
18-24	57	67	55	61	61	55	-	59
25-39	61	65	62	63	63	53	48	61
40+	57	62	71	75	72	64	55	61
Total	58	64	62	64	65	57	51	60

* the under 18 age group is not shown as the completions in this age group are so low.

Earlier research indicates that when field of study is examined there remain areas that are still male dominated (such as engineering, computing and most, but not all, of Modern Apprenticeships), while there are other areas that have for a long time been female dominated (for example nursing or childcare) (Callister *et al.* 2006). In the remainder of this paper we primarily focus on two areas of study when considering possible labour market implications of the gender transition in tertiary education. These are teacher training for the compulsory education sector and the gender balance in enrolments in health training. These data are drawn from the Ministry of Education enrolment database rather than the student dataset as such data are not available at this level on the publicly available website for the latter database. Except where noted, they show enrolments for those under 30 years of age and exclude foreign students.

Table 6 shows enrolments in 2004 for those training to teach in the compulsory education sector. As is well known, almost all early childhood teachers are women (Farguhar *et al.*,

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2006). However, as children move through the education system they increase their chances of having a male teacher.

Table 6: Women as a % of enrolments in teacher training, 2004 (all ages and including foreign students)

	% of enrolments
Early childhood	99
Primary teaching	83
Secondary teaching	60
General	76
Bilingual primary	80
Immersion primary	75

Turning to health, Table 7 shows women as a percentage of enrolments health related training at four levels of qualification for those domestic students under the age of 30. For postgraduate students it needs to be noted that a significant number of students are not shown as many students studying at this level are older. The categories of education where men form more than half of enrolments are marked in italics.

Table 7: Women as a % of enrolments in certificate courses, domestic students under the age of 30, 2004

	Female as % of enrolments
Dental Therapy/Assistant	100
Health Care Assistants	100
Natural Healing/Health	98
Pharmacy Assistant	95
Other Nursing Programmes	91
Occupational Therapy	89
Physiotherapy	82
Introductory Health	82
Public & Environmental	71
Medical Technology	67
Para-medical	54
<i>General Health Programmes</i>	<i>40</i>

Table 8: Women as a % of enrolments in diploma courses, domestic students under the age of 30, 2004

	Female as % of enrolments
Midwifery	100
Pharmacy/ Pharmacology	99
Dental Therapy/Assistant	96
Physiotherapy	83

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Natural Healing/Health	83
Nursing	80
Other Nursing Programmes	56
<i>Para-medical</i>	39

Table 9: Women as a % of enrolments in bachelor degree courses, domestic students under the age of 30, 2004

	Female as % of enrolments
Midwifery	100
Nursing	94
Natural Healing/Health	93
Occupational Therapy	91
Other Nursing Programmes	90
Radiography	86
Medical Technology	75
General Health Programmes	71
Pharmacy/ Pharmacology	69
Physiotherapy	68
Optometry	63
Public & Environmental	62
Medicine & Surgery	57
Dentistry	50
<i>Dental Therapy</i>	<i>37</i>

Table 10: Women as a % of enrolments in postgraduate courses, domestic students under the age of 30, 2004

	Female as % of enrolments
Occupational Therapy	100
Nursing	96
Other Nursing	94
Physiotherapy	91
Radiography	91
Audiology	83
Optometry	78
Public & Environmental	77
General Health	77
Medicine & Surgery (post service)	72
Sports Medicine	71
Introductory Health	70
Medicine & Surgery (pre service)	67
Pharmacy/ Pharmacology	67
Medical Technology	63
Dentistry	55

Some implications of the changes

Overall, the gains in education enrolment and attainment by both women and men are positive. If New Zealand is to be a high-income society competing on quality and innovation rather than quantity and price it is essential that we have a high level of the population completing some form of tertiary education early in their lives and perhaps undertaking further training or retraining as they move through their lifecycle. It is also positive to see women moving into many of the fields of study that have traditionally been dominated by men. This has many positive features. As an example, women who wish to consult with a female doctor now have more choice. But inevitably a change of the size of the gender transition that has taken place in tertiary education in New Zealand will have other impacts on society, including the labour market.

In commenting on a similar transition that has taken place in the US, Buchmann and DiPrete (2006) set out a number of areas where the changes could have an impact. These include:

- Wage gaps, labour force participation, and other labour market outcomes, and
- Trends in educational assortative mating, which then impact on labour market.

In terms of assortative mating, in the US Mare and Schwartz (2006) argue that who marries who has implications for the formation of families, the extent of labour market and income inequality among families and individuals and intergenerational inequality. Their research shows that over the past 40 years in the US, primarily due to the increase in educational attainment of women, the similarity of husbands' and wives' educational attainments has increased markedly. In turn, Costa and Kahn (2000) show that in the US college educated couples are increasingly located in large metropolitan areas. These areas were home to 32 percent of all college-educated couples in 1940, 39 percent in 1970, and 50 percent in 1990. They suggest a primary reason for this is the growth of dual career households and that these households face co-location problems. In a US context they note that smaller cities may therefore experience reduced inflows of human capital relative to the past and thus become poorer. Most of New Zealand's cities, in a global context, are small. In addition such trends will tend to draw people away from living in rural areas. This includes the male GPs who in the past may have been married to a schoolteacher or nurse who could also work in rural areas or small towns. Now the potential male or female GP may have a partner who is a specialist doctor, lawyer or other professional who needs to work in a large urban area.

But even considering individuals outside a family context changes in education are forcing change in labour markets, especially in small towns and rural areas. Based on historical evidence, in New Zealand, as in other industrialised countries, well-educated women have, on average, patterns of attachment to the workplace that are different to men. This applies to participation rates and hours worked (Callister 2005, McPherson 2005)), as well as willingness to work in more remote areas (Janes *et al.* 2004). Overall time use surveys show that women are also slightly less likely to be working in evenings, at night and or at the weekends (Callister and Dixon 2001). This has been due primarily

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to different roles assumed by men and women in childrearing but also factors such as concerns about safety when working in remote areas.

These patterns can be considered in relation to more women training to be doctors. First, if female doctors keep following the broad patterns of working hours described above, then this will result in New Zealand requiring more trained doctors to fill any given level of need. Due to possible changes in norms, it may also mean that overall doctors, including male colleagues, will be less willing to work long hours than in the past, perhaps one reason for the strikes in 2005 about working hours for trainee doctors. But also of significance to an economy that still depends strongly on rural production and the viability of small towns, it may be increasingly difficult to recruit doctors into small towns and rural areas. Both New Zealand and Australian research indicates, for a variety of reasons, female doctors are less willing to work in rural areas (Janes *et al.* 2004, Health Workforce Queensland & Australian Rural and Remote Workforce Agencies Group 2006, Tolhurst 2003). Overcoming this problem will be a challenge.

The changes in the gender mix of the health workforce will also mean that family friendly policies need to be increasingly considered in all areas of the health workforce, not just traditionally female areas such as nursing.

Turning to education, one question is whether the gender imbalance in the training of teachers flows through to an imbalance in employment and then ultimately has some affect on the education outcomes of the next generation? Table 11 shows that the majority of teachers are female (around 71%), as are more than half of senior managers in schools. While the majority of principals are male, the proportion of female principals has increased from 34% in 1999 to 41% in 2004.

Table 11: Trends in gender composition of teaching workforce

	1999	2000	2001	2002	2003	2004
Male Principal	1,663	1,650	1,632	1,561	1,518	1,465
Female Principal	859	899	952	967	1,008	1,028
Male Management	4,103	4,054	4,099	3,911	3,975	3,953
Female Management	5,749	5,603	6,139	6,053	6,291	6,399
Male Teachers	7,276	7,427	7,508	7,713	8,040	8,464
Female Teachers	24,654	25,457	25,586	26,003	26,835	27,245
Total Male	13,042	13,131	13,239	13,185	13,533	13,882
Total Female	31,262	31,959	32,677	33,023	34,134	34,672
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% of principals	34	35	37	38	40	41
% of managers	58	58	60	61	61	62
% of total teachers	71	71	71	71	72	71

Source: <http://educationcounts.edcentre.govt.nz/statistics/downloads/teaching-staff-march04.xls>

Does it matter if the majority of teachers are female? In New Zealand, when this question has been discussed one response is that it is the quality of teaching that matters not the gender of the teacher. Determining whether gender matters in teaching outcomes is a very difficult research question. But recent research by Dee (2006a&b) in the US suggests that outcomes for boys could be improved if there were more male teachers. Using

longitudinal data Dee found that assignment to a same-gender teacher significantly improves the achievement of both girls and boys, the teacher perceptions of student performance and student engagement with the teacher's subject. As an example, Dee's data suggests that having a female science teacher increases the likelihood that a girl views science as useful for her future. He notes that because most US middle-school teachers in the majority academic subjects are female, his results suggest that the gender dynamics between teachers and students strengthen boys' large underperformance in reading while helping overcome the more modest underperformance of girls in maths and science.

As shown, in New Zealand the majority of teachers in primary school are female. In addition of particular relevance to those Maori children attending immersion or bilingual units, the majority of teachers training to teach in these areas are also female. While other research suggests a wide range of factors will be influencing outcomes for boys and girls, if Dee is correct, then the gender composition of the teaching labour market could be having some long-term impact on the overall workings of the labour market.

Conclusion

Like most other industrialised countries, in recent decades New Zealand experienced a gender transition in tertiary educational enrolment. With many researchers and policy makers still focusing on those areas that are male dominated, such as Modern Apprenticeships, there has been a lack of recognition of the dramatic changes that have taken place in most other areas of study. Two main areas are considered in this paper, teaching and health workers. We argue while there are many positive implications in the rise of human capital of women, there are also some potential outcomes that will provide new challenges within the labour market. In particular, we suggest that the health sector, already facing difficulties in attaching and retaining staff, will also have to make some adjustments, especially in rural areas, if it is to retract and retain the women who are increasingly form the majority of new entrants in many skilled occupational groups.

Further research

There are a number of areas where further research would be useful. The first, and perhaps one of the most difficult, is determining why this gender transition has taken place. As part of this research, there is a need to consider why particular areas of tertiary education remain so strongly male dominated and why some remain strongly female dominated. Currently research tends to focus on barriers to women in those areas that remain male dominated. Already, a number of hypotheses are being put forward as to why the transition has taken place including: that the schooling system has become feminised, both in terms of curriculum and teaching staff, which assists a greater proportion of girls to move onto tertiary education; that more boys are being raised by mothers without good male role models present in the family; that male behavioural, psychological or developmental characteristics are slowing increases in male educational attainment; that new courses being developed by tertiary education providers tend to be in 'female dominated' subjects; that women have seen better gains than men in earnings and other material benefits from their participation in higher education; through to the idea

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that women are genetically 'brighter' than men but have historically been held back by discrimination within the family, within schools and in the wider society (Buchmann and DiPrete 2006, DiPrete and Buchmann 2006).

Second, while not focussed on in this paper, ethnic dimensions of this gender transition are especially important. If Maori and Pacific people are to dramatically increase their participation in education and bring them up to the same rates as Europeans, then lifting male participation rates is particularly important. Understanding why men from these communities are, on average, under performing relative to women in educational settings, is important.

Finally, more research is needed on the long-term implications of these changes in areas such as the closing of pay gaps, couple formation, fertility decisions, decisions about paid and unpaid work within couples, and both internal and external migration decisions. In particular, more research is needed as to family friendly policies that may be needed if the investment in women's education, by both the women themselves and by the taxpayer, is to be optimally utilised while at same time allowing women, and men, to have both careers and be parents.

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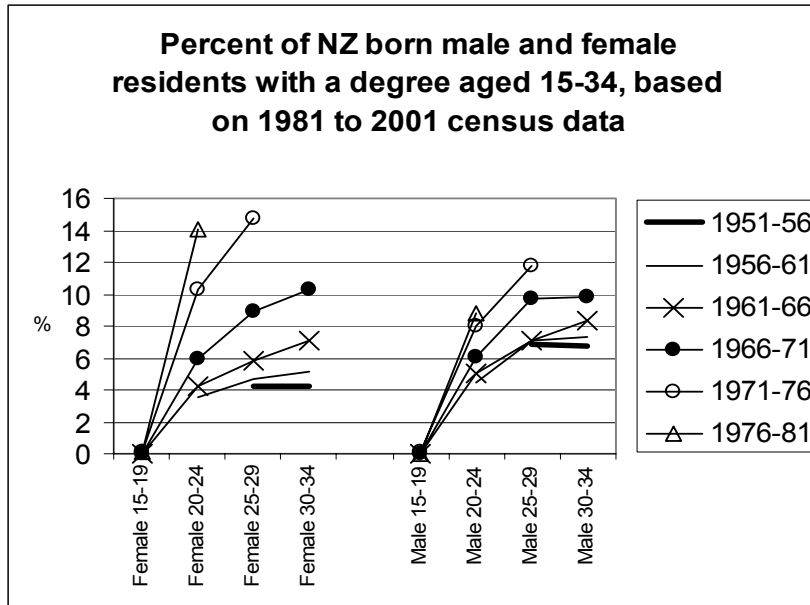
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Appendix

Census cohort analysis: The proportion of men and women from recent cohorts who held a degree



THE EFFECT OF SETTLEMENT TYPE ON THE LABOUR FORCE PARTICIPATION OF NEW ZEALAND WOMEN

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Abstract

A key priority of the present government is to improve women's participation in the workforce. That education, age and reproduction decisions all play an important role in female labour force participation is well documented. What is less well understood is the role played by the geographic context in which these decisions are made – the relationship between participation and place. Based on analysis of the 1996 census data of over one million New Zealand women of working age, the aim of this paper is to explore the way in which different types of settlement are associated with different levels of female participation in the labour force. Our findings reveal that place of residence does affect the propensity of women to engage in wage labour – over and above the standard human capital and demographic determinants. A unique feature of this study is the explicit consideration of the relationship between partnership, participation and place. We find that not only does the presence of a (male) partner have a strong and statistically significant influence on female participation but that its effect is also very sensitive to settlement type. Particularly interesting is the different effect partners have on female participation within small versus large urban settings.

Introduction

Probably the single most significant change to post-war labour markets has been the dramatic increase in the labour force participation of women. One of its most perplexing characteristics, however, is its marked and persistent variation within countries and within regions. The improvement of women's labour force participation has emerged as a key priority for government;¹ it was given special prominence by the OECD in the 2005 OECD survey of New Zealand (Jaumotte 2003; OECD 2005) and has been reflected in economic and social policy, such as the *Working for Families* package, paid parental leave, improvements to annual holiday entitlements, and early childhood education and care, as well as pay equity (Affairs 2004). Despite this attention we observe that the *Workshop on Labour Force Participation and Economic Growth* hosted by The Treasury, Ministry of Social Development, Ministry of Women's Affairs, and the Department of Labour, gave only passing attention to the *geography* of participation (The Treasury 2005).

The purpose of this paper is to investigate the way in which settlement type in general and proximity to metropolitan labour markets in particular is associated with the labour force participation of women as well as the way in which these particular geographies are associated with the divisions of labour within households.

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The paper begins with a summary of the literature on the relationship between place and participation. We then introduce the data, the regression model and define each of the variables. The variation in female participation rates over categories of settlement is then described in terms of both the likelihood and the degree of participation. We then consider the effect of controlling for the composition of the population specifically the influence of age, fertility, education and the presence of a partner. This is followed by a consideration of the way partnership affects participation and the interactions of participation and place. Under Future Research we raise the issue of causality and how longitudinal data might help us better understand the above relationships.

The Influence of Place on Women's Labour Force Participation

In addition to documenting the effect of dependent children, education and age, the international literature has shown that female labour force participation is also sensitive to the characteristics of local labour markets (Gordon 1970; Penhale 1980; Molho 1983; Stolzenberg and Waite 1984; Lillidahl and Singell 1985; Morrison 1989; Ward and Dale 1992; Odland 1998; Morrison 1999). Stolzenberg & Waite's (1984) for example, observe how local areas have substantive and statistically significant effects in weakening or strengthening the relationship between a mother's likelihood of labour force participation and number of children.

Participation rates can vary both within and across regions for two reasons; either the demographic composition of the female population differs from one place to another (Molho 1983), or places of residence differ in the employment opportunities and constraints - in the ability of women to accommodate both child rearing and paid work for example (Odland and Ellis 2001). Other factors include labour market characteristics, such as higher wage earning potentials (Bowen and Finegan 1969; Oaxaca 1973; Gallaway, Vedder et al. 1991; Isserman and Rephann 1993), urban structure (Simpson 1982), and economic growth (Penhale 1980; Ward and Dale 1992; Johnstone and Pool 1996; McCall 1998).

Problems of mobility can also constrain opportunities for women to enter or extend their hours of paid work. The inability of some women to move residence in order to maximise their work opportunities contributes to differences of participation observed from place to place, particularly among women with low levels of education and wage earning capacity as noted by McCall (1998). Other place-specific differences in opportunities and constraints include the availability and cost of childcare, tertiary (re)training and the presence of social networks.

The New Zealand literature on locational constraints on women's employment began by focusing on comparisons between and within urban regions (Hyman 1979). In line with international evidence, inter-urban comparisons of participation by women with children show employment is greatest in areas with high overall labour force participation rates and strong economic growth (Penhale (1980). In a later study of regional labour markets, Morrison (1999) showed that this variation is most significant among the least-educated and least-experienced working populations for whom mobility is most constrained, a finding also supported in the international literature (Odland and Ellis 2001).

The literature also supports the theoretical expectation that women's labour force participation rises with population density (Hyman 1979; Penhale 1980; Poot and Siegers 1992; Ward and Dale 1992; Isserman and Rephann 1993; Morrison 1999). The reasons include the existence of greater opportunities for full-time work, the concentration of tertiary sector employment in urban areas as

well as the combined employment needs of career couples which require denser local labour markets.

Early UK based evidence linked high female inactivity with rurality and, to a lesser extent, industrial structure (Gordon (1970). Lillidahl and Singell (1985) also note a dramatic decline in women's labour force participation at the edge of cities and question how much of this non-participation is a result of family income and demographic differences, and how much the decline is a product of inadequate job opportunities.

Finally, while most studies take into account either the effect of marriage, male partner's income, or male partner's labour force position on women's participation, no studies could be found that explicitly consider the different effect partnership might have on participation in different settlement contexts.

Our review of the literature led to four hypotheses. Firstly, that women's labour force participation would continue to vary within countries even after controlling for the demographic, fertility and educational attributes. Secondly, that one of the principle geographic explanations is proximity to the job opportunities which large local labour markets offer. A third argues that fertility, participation and location decisions are interrelated and made jointly, albeit with different lead and lag structures. To these we add a fourth hypothesis, that focuses on the importance of partners, namely that the nature of the local labour market affects the joint decisions couples make over their respective engagement in paid work.

Data, Model and Variables

In the explorations to follow we draw on census data representing over one million New Zealand women of working age, 20-65 years. Our analysis is based on special cross-tabulations prepared from the 1996 census chosen initially because of the questions asked in that census about fertility.

The decision to enter the labour force is modelled as a binary choice, initially as participation per se and then conditionally, that is, the probability of working fulltime given that some paid employment is undertaken. Weighted least squares logit regression is used to estimate the parameters. As geographers we first begin by estimating the fixed effect of settlement type and only then introduce four sets of control variables: age group of female, age group of the youngest dependent child, highest qualification of female, presence of male partner, and where appropriate, the labour force status of male partner.

The participation model may be written as:

$$(1) \quad P_{sd} = \alpha + \beta_1 D_{sd} + \beta_2 S_{sd} + \epsilon_{sd}$$

where P_{sd} is the probability that the i^{th} group of woman, in settlement type S , with attributes D , will have engaged in paid work in the week prior to the 1996 census. D and S are vectors of relevant characteristics and β_1 and β_2 are vectors of associated parameters. The conditional model applies the same equation to women who are already employed in order to estimate the probability of full-time work. A third model considers P_{uisd} , the probability of female unemployment, as a function of the same set of variables.

For estimation purposes the logit function is defined as the log of the odds ratio, so P_{sd} is rewritten as

$$(2) \quad \log (P_{sd} / 1 - P_{sd})$$

The large sample expectation of ε_{isd} is zero and its variance is

$$(3) \quad \sigma_{sd}^2 = 1 / (N_{sd} \cdot P_{sd} (1 - P_{sd}))$$

where N_{sd} represents the population for group sd .

The fact that we are estimating parameters from cross tabulated data means that the estimates refer to *groups* of women, not individual women as would be the case if we were using records on individuals. The groups are weighted according to the proportion of the population they represent so the weights are proportional to $N_{sd} \cdot P_{sd} (1 - P_{sd})$. Parameter estimates from weighted least squares logit models have been shown to be very close to those that would be obtained from individuals with the same range of attributes (see for example Li 1975) which makes using cross-tabulations a quick, low cost alternative to the more expensive unit records.² We turn now to the data set and variables in Table 1.

The set of five independent variables required for women *with* partners implies an $8 \times 7 \times 6 \times 5 \times 5 = 8400$ cell cross-tabulation. The table for women *without* partners is much smaller at 1680 cells ($8 \times 7 \times 6 \times 5$). We concatenated (joined) the two data sets to form a single multiway table of 10,080 cells. About half of these cells were empty and removing these left us with 5,477 cells.³ The process of ‘folding’ turns these n cells into n rows with each cell address uniquely identified by the 0 or 1 in the columns denoting categories of each variable.

Table 1. Variables used in modeling female labour force participation 1996

Dependent Variable Components	
<i>Labour Force Status of Female</i>	
Employed Fulltime (30 hrs or more per week)	FT
Employed Part-Time (less than 30 hrs per week)	PT
Unemployed and Actively Seeking Work	U
Not in Labour Force	NLF
Not Applicable	NA
Independent Variables	
<i>Area of Usual Residence</i>	
Main Urban Community	MUA
Satellite Urban Community	SUC
Independent Urban Community	IUC
Rural Highly Urban Influence	RHUI
Rural Moderate Urban Influence	RMUI
Predominantly Rural	RLUI
Highly Rural/Remote	HRR
Not Included	UD

<i>Age Group of Female</i>	
15-19 Years	A1519
20-24 Years	A2024
25-29 Years	A2529
30-34 Years	A3034
35-39 Years	A3539
40-44 Years	A4044
45-65 Years	A4565
<i>Highest Qualification of Female</i>	
No Qualification	NQ
School Qualification	SQF
Vocational Qualification	VQF
Post School Qualification Not Elsewhere Incl. ¹	PSQN
Degree or Higher	DHF
Not Specified	NS
<i>Youngest Dependent Child</i>	
Dependent Children 1-5 Years	DCLT5
Dependent Children 6-13 Years	DC613
Dependent Children 14-17 Years	DC1417
Adult Children	DCADULTS
No Dependent Children	NDC
<i>Presence of a (Male) Partner</i>	WP
<i>Labour Force Status of Male Partner</i>	
Employed Full-Time	FTMP
Employed Part-Time	PTMP

Measuring Labour Force Participation

The five categories listed under dependent variable components in Table 1 were used to construct the three participation rates used in this paper. The conventional rate refers to the undertaking of paid work of an hour or more per week, E, plus those actively looking for work, U, divided by all those of working age, T, (20-65 in our case).⁴ In this paper we exclude those looking for work (the unemployed, U) from the numerator so our participation rate becomes simply E/T.⁵

Our conditional measure, the *full* time work rate, is the number of women working 30 hours or more per week (Ef) divided by the total number of women (20-65) employed (E), that is, Ef/E. The third measure we explore is the unemployment rate itself, U/T.

Settlement types

The main reason we use the Census of Population and Dwellings is the access it provides to geographic detail on the residence of households. Almost all studies which recognise the role of place in participation specify actual locations, usually regions, but sometimes urban areas or cities within them.⁶ In a departure from this practice we replace what is often an arbitrary statistical

division of a country into geographic units by a classification of places based on both their identification as urban or rural *and* their proximity to the country's largest, metropolitan labour markets.⁷ The rationale here is that it is the geographic *relationships* embodied in the settlement system which are important in understanding labour participation rather than location per se.⁸

Statistics New Zealand's recent (re)classification of rural and urban recognises that a rural or small urban centre's proximity to a main city has significant influence on the labour market opportunities of its residents. For example, a female resident in a small remote West Coast town and a female resident of a small town close to Wellington each face a quite different labour demand schedule even though the towns themselves may be of the same size. Access to facilities, services, or employment opportunities differ substantially in these two cases however and can be expected to have consequences for the division of labour between work and family and hence on participation. Under a dichotomous classification of rural or urban both towns would appear in the same category however, the new classification allows the analysis to be based not only on an explicit 'urban' and 'rural' dimension but also by degree of access to the major urban labour markets.⁹

Demographic and Education Variables

The seven age groups listed in Table 1 use fairly conventional divisions but in order to avoid the competing effects of schooling we confine our analysis to those women in the working age years 20-65. The 'fertility' measures in Table 1 are based on the ages of the youngest dependent child, under 5 years of age, between 6 and 13, 14-17 and the presence of (dependent) adult children. The five education categories are based on the highest qualification attained.¹⁰

The primary variable we use to refer to partners is the presence of a (male) partner. The remaining available variables in Table 1 refer to the labour force status of the partner, i.e. whether they are employed, and if so, fulltime or part time.

Obtaining least squares estimates for categorical variables requires the specification of a base category in each case. The base used throughout is the group of women, 25-29 years old living in Main Urban Areas without qualifications, without partners and without dependent children.

Participation Rates by Settlement Type

An initial look at participation in 1996 shows that women's engagement *does* vary by settlement type, but *not* in the expected direction (Table 2). About two thirds of women living in urban areas are in the labour force, but their participation rates are actually *lower* than those women living in rural areas.¹¹ This is more specifically the case for women who live in Satellite (SUC) and Independent Urban Centres (IUC) and they are noticeably less likely to be engaged in paid work. In stark contrast with the international literature, in New Zealand it is *not* women in the more densely populated labour markets who participate most, but those women living in rural areas; their mean participation rate is 71 percent compared to 68 percent among urban women.¹²

The influence of 'rural' residence in truth depends critically on their proximity to urban centre employment opportunities. Women living in rural areas that lie just outside the main urban areas, those with a high urban influence, are noticeably *more* likely to be engaged in paid labour than those actually living in urban areas. This difference diminishes as access to the main urban markets improves but appears to rise again in the more remote rural areas, although the latter three categories in Table 2 do not reach the conventional margin of statistical significance. They are

intuitively plausible nevertheless with the costs of commuting to jobs reducing the net returns to urban employment so that reliance on rural and small town employment opportunities rise with their remoteness.

Table 2: The labour force participation rates of female population by type of settlement. New Zealand females of working age 20-65, 1996.

Settlement Type		Labour Force Participation Rate	
		Mean	S.D.
Urban	Main urban area	0.695	0.202
	Satellite Urban Community	0.633	0.239
	Independent Urban Community	0.468	0.232
	Total	0.680	0.200
Rural	Rural High Urban Influence	0.739	0.221
	Rural Moderate Urban Influence	0.715	0.227
	Rural Low Urban Influence	0.712	0.230
	Highly Rural/Remote	0.721	0.237
	Total	0.710	0.230

Fulltime Employment

The labour force participation rates we have been using so far (E/T) simply indicate if the woman worked for pay (or in a family business) for an hour or more in the week prior to the census. As such this variable gives no indication of the actual number of hours worked.¹³ In order to capture some of the variation of employed women over the hours of work distribution we introduce the conditional fulltime employment rate, (Eft/E) the mean of which is 64%. Rates for each of the seven settlement types are shown in Table 3.¹⁴

Table 3. Conditional fulltime labour force participation rates by settlement type; women 20-65, 1996

Settlement Type		Conditional Rate (Eft/E)
Urban	Main Urban Area	0.661
	Satellite Urban Community	0.592
	Independent Urban Community	0.578
Rural	Rural High Urban Influence	0.618
	Rural Moderate Urban Influence	0.599
	Rural Low Urban Influence	0.587
	Highly Rural/Remote	0.579

The chance of an employed woman obtaining *fulltime* work beyond the main urban areas was noticeably lower than those residing within them. The chances of fulltime work rises the closer a woman resides to the largest labour markets. Such a pattern is exactly what one would expect from available theory and underscores the importance of measuring participation in terms of the amount of paid work. The exception to this neat pattern however are the results for Independent and Satellite Urban areas for women living in these areas show rates which are more similar to rural areas outside the commuting range of main urban areas.

Unemployment

In terms of settlement type female unemployment rates behave inversely to the participation rate: they are lowest in urban settlements and rise with distance to the main urban settlements. In this sense the spatial mirrors the temporal, (see Figure 3 of the Stroombergen paper in this volume for an example). Again, breaking the neat picture is the Satellite and Independent Urban Communities, both of which show relatively higher unemployment rates, Table 4.

In summary, we have established that women's chances of employment continue to vary systematically by settlement type but each settlement type has a different relative influence depend on whether one is considering participation per se, engagement in fulltime work or searching for work (unemployment).

In general, the results are consistent with available theory. However the data used so far does not control for composition effects – the fact that settlements are occupied by women whose demographics and educational attributes alone raise or lower their likelihood of participating and working full time. A more specific test for settlement effects on participation needs therefore to control for the different mixes of women living therein.

Table 4: Mean unemployment rates by settlement type of women 20-65, 1996

Settlement Type		Unconditional Unemployment Rate (U/T)
Urban	Main Urban Area	0.049
	Satellite Urban Community	0.051
	Independent Urban Community	0.054
Rural	Rural High Urban Influence	0.031
	Rural Moderate Urban Influence	0.039
	Rural Low Urban Influence	0.039
	Highly Rural/Remote	0.034

Settlement Effects after Controlling for Composition Effects

The effect of including the vector of demographic variables (D) into the same equation as settlement effects confirms the overwhelming negative impact that dependent children, particularly those under six, have on whether a woman works at all, as well as the likelihood that she will work full time and confirms that participation also falls substantially if the youngest child is under six. When the youngest child is 6-13 years old the negative impact on participation is slightly weaker but still statistically significant. The likelihood of a mother gaining employment increases as children become older (see Table 5).

Our results also confirm the positive relationship between education and participation; the higher the level of education the more likely a woman will enter paid work. Underlying each of these attributes is the pervasive effect of age in accounting for variation in women's labour force participation; women in the youngest and oldest age groups are least likely to be in paid work.

Entering control variables has an effect on the role of settlement type. For example composition effects diminish the likelihood of participation in Independent Urban Communities and Satellite Urban Communities to the point where they cease to be statistically different from those of the Main Urban Areas. This suggests that it was the *composition* of the female population rather than the labour demand schedule characteristic of such locations which was responsible for much of their lower participation observed in Table 2.¹⁵

In summary, Main Urban Areas attract those women with higher propensity to participate in paid work and once we control for their attributes we still find women more likely to engage in at least some paid work (or in a family business) in rural areas; in fact the different mix of women living in remote areas was actually suppressing the magnitude of this settlement effect on participation. One of the possible reasons may lie in the very definition of participation itself for it only requires that the respondent works an hour or more a week.

Table 5: Labour force participation (E/T) by settlement type controlling for demographic and educational attributes. Odds ratio, weighted least squares logit estimates. New Zealand females of working age 20-65, 1996.

Logit	Odds Ratio	t
Dependent Children 1-5 Years	0.228	-34.34
Dependent Children 1-5 Years	0.228	-34.34
Dependent Children 6-13 Years	0.457	-19.87
Dependent Children 14-17 Years	0.876	-3.10
Adult Children	1.312	6.74
Post School Qualification Not Elsewhere Incl. ¹	1.701	10.11
35-39 Years	1.023	0.45
40-44 Years	1.109	1.90
45-65 Years	0.478	-16.00
Presence of a (Male) Partner	1.932	23.82
Satellite Urban Community	0.884	-1.65
Independent Urban Community	0.929	-1.91
Rural Highly Urban Influence	1.255	2.64
Rural Moderate Urban Influence	1.173	2.28
Predominantly Rural	1.190	3.14
Highly Rural/Remote	1.296	2.77
Not Included	0.842	-0.16
Number of obs = 3569, F (21, 3547) = 146.84, Prob > 0.0000, R-Squared = 0.4651, Adj R-Squared = 0.4619, Root MSE = 0.7278		

Participating in full-time work

Each of the variables which were important in accounting for participation per se become exaggerated when we consider the likelihood employed women will work fulltime - in both their effect on the odds of employment and in terms of their statistical significance; Table 6. The opportunities for women to work fulltime are clearly strongest in main urban areas (all the place odds ratios are significantly less than 1.0) and this result brings the New Zealand result back in line with the international evidence.

Table 6: Conditional full time labour force participation (Eft/E) by demographic attributes and settlement type. Odds ratio, weighted least squares logit estimates. New Zealand females of working age 20-65, 1996.

Logit	Odds Ratio	t
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Dependent Children 1-5 Years	0.189	-59.22
Dependent Children 6-13 Years	0.275	-56.45
Dependent Children 14-17 Years	0.536	-27.22
Adult Children	0.853	-6.83
Post School Qualification Not Elsewhere Incl. ¹	1.087	2.56
School Qualification	1.062	3.198
Vocational Qualification	1.194	8.67
Degree or Higher	1.496	14.40
20-24 Years	0.651	-12.76
30-34 Years	0.743	-9.46
35-39 Years	0.644	-14.04
40-44 Years	0.661	-12.75
45-65 Years	0.428	-29.33
Presence of a (Male) Partner	0.838	-9.61
Satellite Urban Community	0.818	-4.37
Independent Urban Community	0.803	-9.53
Rural Highly Urban Influence	0.878	-2.90
Rural Moderate Urban Influence	0.865	-3.90
Predominantly Rural	0.873	-4.66
Highly Rural/Remote	0.837	-3.74
Number of obs = 3023, F (20, 3002) = 350.37, Prob > 0.0000, R-Squared = 0.7001, Adj R-Squared = 0.6981, Root MSE = 0.39351		

Interaction Effects

Although there are marked differences in fertility across the country the influence of dependent children of different ages has a remarkably similar effect across all seven settlement types. There is not, in other words, a strong interaction effect between settlement and fertility when it comes to accounting for participation. The odds on participation (relative to women without dependents) increases as the youngest dependent child ages regardless of settlement type. The strength of the relationships however (the t statistics) are most pronounced in the main urban areas.

The influence of education levels on participation is also highly consistent across the settlements with participation rising at roughly the same magnitude with successive increases in the highest qualification. Interestingly, the relative effect of having a degree on participation is most marked, not in the cities but in the more remote rural areas. Moreover, when it comes to fulltime work, the relative strength of both vocational and degree qualifications on the probability of engaging in fulltime work rises noticeably in the Satellite and Independent Urban Centres. Both underscore the greater premium attached to education outside the main urban areas – a point we return to below.

The relative influence of age on participation is also similar across the settlements, but participation rates of older women are more likely to fall (relative to our age base) in rural areas compared to the main centres. Age also has a different influence on the participation in full time work across the three urban settlement types. Younger women (20-24) in independent and satellite urban areas are

far more likely to be engaged in fulltime work than their counterparts in the major centres where a larger proportion are engaged in tertiary education.

The Effect of Partnership on Participation¹⁶

One of the striking features of the results presented so far is the highly significant influence which (male) partners appear to play in labour force participation outcomes of women, as Table 5 and 6 show.¹⁷ There is a high correlation between partners in their propensity to work or not to work, as well as a complementarity with the hours of work undertaken.¹⁸

Considerable attention is now being paid internationally to the implication of these relationships for household location decisions, that is to the geography of career couples (Frank 1978; Green 1995; Green 1997; Costa and Kahn 2000) as well as associated questions of family, migration and employment (Lichter 1982; Bird and Bird 1985; Snaith 1990; Shields and Shields 1993; Cooke and Bailey 1996; Bailey, Blakes et al. 2004). These studies are part of a much broader literature that is addressing the complex geography of households (Buzar, Ogden et al. 2005). In this paper we focus on the way settlement type affects the distribution of paid work across adults *within* the household.

The paper by Callister and Newell in this volume refers to the way in which the growing demand for simultaneous employment of both partners (especially those with high levels of education) render it increasingly likely that they will *have* to locate in the most dense and largest labour markets if both partners are to secure employment that matches their career aspirations (Callister and Newell 2007). If this argument is substantiated empirically then it has implications for competitiveness of different settlement types, for relocation policies and even for environmental policy - because career couples tend to commute longer distances (Green 1995).

There are six questions about the relationship between partnering, work and settlement type that are of interest here. Each addresses the extent to which a partnered woman's propensity to work is influenced by her partners employment status, controlling for demographics including fertility and education as above. The reasons for this are manifold. The partnership variable is also likely to be picking up attributes of women which are not captured in the standard set of human capital variables already in the model but that are nevertheless positively correlated with matching on both the partner and job markets. This results is consistent with both the theoretical (e.g. Becker) and the empirical assortative mating literature which shows that men and women do not partner randomly but are likely to have similar characteristics in terms of education and employment status (Del Boca, Locatelli et al. 2000; Henz and Sundstrom 2001; Baxter 2005).¹⁹

Our first question addresses the employment effect of simply having a partner, regardless of whether the partner is employed or not. Table 5 showed that the marginal effect of having a partner substantially increases the likelihood a woman will engage in paid work; partnered females are almost *twice* as likely to be working (odds ratio = 1.93).

Table 7: The impact of being partnered with someone who is employed on the odds of a partnered woman being employed, 1996.

Logit	Odds Ratio	t
Dependent Children 1-5 Years	0.225	-45.56
Dependent Children 6-13 Years	0.492	-23.31
Dependent Children 14-17 Years	0.923	-2.47
Adult Children	1.197	5.22
Post School Qualification Not Elsewhere Incl. ¹	1.510	10.15
School Qualification	1.590	20.61
Vocational Qualification	2.278	30.84
Degree or Higher	2.313	22.19
20-24 Years	1.005	0.11
30-34 Years	0.958	-1.20
35-39 Years	1.062	1.61
40-44 Years	1.203	4.45
45-65 Years	0.596	-13.97
Presence of an employed partner	5.559	77.27
Number of obs = 2643, F (14, 2628) = 680.80, Prob > 0.0000, R-Squared = 0.7839, Adj R-Squared = 0.7827, Root MSE = 0.46756		

Our second question is whether being partnered with someone who is *employed* further raises the likelihood that the woman herself will be employed. The answer is a clear yes, the odds of her working increase *fivefold*; an employed partner has a much greater influence on a woman's participation than partnership alone, Table 7.²⁰

Our third question is whether the *amount* of work engaged in by an employed male partner influences his partner's propensity to participate. And here again the answer is a clear yes. Adding a variable representing partner's engagement in fulltime work to the model in Table 7 raises the odds of a woman working over and above the fact that her partner is employed.

A fourth related question is whether, having a partner who is *unemployed* has any effect on a partnered woman's likelihood of working. The answer is no; her odds of being employed remain unchanged, suggesting that unemployment is a temporary phenomenon for most partners.

Our fifth question asks whether a partner can also have a negative effect on a women's likelihood of participation. The answer is a definite yes. A male partner's location outside the labour force significantly *decreases* the chances his partner will be in paid employment. It is possible in such cases that both partners may be students or retired although note how both the age range and the fact that all these regressions reported here have a full set of controls probably precludes such composition effects.

Our sixth question has to do with the relationship between the *amount* of work a woman is engaged in and her partnership status. Our interest here lies in testing the so-called backward sloping supply curve effect on female participation, the argument being that if the partner is working and earning sufficiently, the woman is more likely to withdraw some or all of her labour from the market.²¹ The empirical issue is the point at which male engagement with the market tends to reduce female labour supply. The career couple hypothesis would suggest otherwise with the two participations reinforcing rather than countering each other.²²

Table 8: The negative influence of partnership on the propensity of employed women to select fulltime work, New Zealand, 1996.

Logit	Odds Ratio	t
Dependent Children 1-5 Years	0.190	-57.82
Dependent Children 6-13 Years	0.275	-55.29
Dependent Children 14-17 Years	0.539	-26.41
Adult Children	0.865	-6.14
Post School Qualification Not Elsewhere Incl. ¹	1.100	2.87
School Qualification	1.069	3.47
Vocational Qualification	1.203	8.87
Degree or Higher	1.545	15.32
20-24 Years	0.658	-12.22
30-34 Years	0.739	-9.41
35-39 Years	0.639	-13.98
40-44 Years	0.660	-12.65
45-65 Years	0.426	-28.91
Presence of a (Male) Partner	0.825	-10.26

Number of obs = 3023, F (14, 3008) = 471.19, Prob > 0.0000, R-Squared = 0.6868, Adj R-Squared = 0.6854, Root MSE = 0.40172
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We explore two possible effects – the first being the influence which simply having a partner (employed or not) has on the likelihood that an employed women will work fulltime (Eft/E). Interestingly the effect was strongly negative; working women were less likely to work fulltime if they have partners (even with the full set of controls in place). Table 8 shows the diminished odds on the partnership variable.

If instead we just consider the effect of those partners *who are in employment* on the chances an employed woman will work fulltime the effect is actually positive – the odds increase and the significance level is higher. Thus, while partnership per se negatively affects the likelihood an employed woman works fulltime, this is not the case when partners are themselves employed.

The Interaction of Partnering, Employment and Settlement Type

A central question for this paper is whether or not the employment implications of partnering are affected by the geographic context? For example, does partnership have the same influence on women's employment in the main cities as it does in the smaller towns and in the countryside?

We will focus primarily on urban size by considering the differences between main urban areas and smaller towns (Satellites and Independent Urban Centres). This way we largely avoid the confounding differences which farm work can introduce into these comparisons. We also approached this question by running our models just for urban areas and then testing for small town interaction effects on the partnership variable. Using this approach we test whether living in Satellite and Independent centres means that the presence of working partners has a *different* effect on female participation than in the Main Urban Areas. The answer is no. While the interaction effect is positive it is not significant.

Among partnered women we then ask whether women were more likely to work if their partner worked fulltime and whether this relationship holds any differently in Satellite and Independent Urban Centres communities. Again the answer is no; the new coefficient is positive but not significant.

We then asked whether the effect of adding a partner on the odds that a women otherwise employed will work fulltime differs according to the type of urban centre. The answer is yes; the presence of a partner has a *much greater effect* in reducing the propensity of employed women to work fulltime in Satellite and Independent Urban Centres than in Main Urban Areas. The marginal contribution of men's additional work in small towns is to *decrease* the likelihood that women will work fulltime whereas in large urban markets it is to raise it.

These last highly significant interaction effects suggest a difference in motivation for fulltime work among women in large and small cities. In the larger urban centres there are more career opportunities for women. In smaller centres a female with a partner may take on fulltime work out of necessity, so that when men secure fulltime work, women reduce their hours of work. This same result may also reflect substitution effects in Satellite and Independent urban areas - men taking most of the few fulltime jobs in such areas.

There is the possibility of course that it is not geography but the different socio-economic position of women in small and large urban areas that is operating to generate the above results. The propensity of women in Satellite and Independent settlements to withdraw their labour when their partners get fulltime work may simply reflect the lower socio-economic of women in small urban centres. In contemporary large labour markets, particularly among educated couples, men and

women's paid work is less likely to be substitutable within the household. Among this stratum work is more likely to be undertaken for its own sake and enjoyment rather than simply a means of income generation to be substituted by another adult whenever possible.

We tested this socio-economic hypothesis by rerunning our previous test for two different education levels, those above and below School Qualifications (but we had to remove the main education terms when stratifying the sample due to collinearity). We found however that the small town interaction effect *still* held regardless of whether we applied the model separately to women with a maximum of school qualifications or to those with higher qualifications. In both cases there was a significant small –town-working-partner negative interaction effect on the odds of employed women working fulltime, even among the better educated women.

Table 9. The influence of small town residency and the partner's fulltime work on the propensity of women to work fulltime on women with a maximum of school qualifications only. Urban areas only.

Logit	Odds Ratio	t
Dependent Children 1-5 Years	0.183	-28.61
Dependent Children 6-13 Years	0.268	-27.12
Dependent Children 14-17 Years	0.542	-12.96
Adult Children	0.864	-2.96
20-24 Years	1.021	0.24
30-34 Years	0.696	-5.55
35-39 Years	0.599	-7.76
40-44 Years	0.594	-7.66
45-65 Years	0.364	-15.93
Presence of an employed partner	1.203	4.00
Presence of an empl'd partner x Small town residence	0.807	-5.48
Number of obs = 565, F (11, 553) = 121.72, Prob > 0.0000, R-Squared = 0.7077, Adj R-Squared = 0.7019, Root MSE = 0.34786		

Table 9 shows that within urban areas as a whole the effect of having a partner in fulltime work raises the likelihood that employed women will engage in fulltime work but lowers her likelihood of employment, especially if these women live in smaller settlements.

In the larger, denser urban labour markets the more likely it is that fulltime work will be undertaken by *both* adults in partnered households. Women living in larger cities are less likely to reduce their labour supply when partners hold fulltime jobs than their counterparts living in small, scattered urban markets. However, the fact that this is also the case for women with lower levels of education suggests that price effects in larger centres may necessitate both partners working. With urbanization the partnering markets and labour markets reinforce each other to collect productive talent in a few concentrated places.²³ Our results are therefore consistent with and support the evolving 'career couple' thesis being advanced by Costa and Kahn (2000).

Conclusions

What this cross sectional study of the New Zealand census data suggests is not only that the country's settlement geography has to be factored more explicitly into models of female labour

force participation but that there are alternative ways of bringing in that geography. Our paper is unusual in its use of settlement type as an influence but this is justified by the way in which it has illuminated both the role of employment density, the proximity to the major urban labour markets and exposed the sensitivity of increased hours of participation to location, as well as the differential way partnership affects participation across the country.

We have also shown that while the key demographic influences on female participation rates continue to hold throughout the settlement system their relative strength and statistical significance can vary systematically from one settlement type to another. We have noted this particularly in the case of young women where the amount of work they undertake depending on where they work.

Finally, we have spent some time exploring a relatively neglected relationship, that is, between partnering and participation in paid work. The range of issues is considerable but one result is quite clear - women and their partners do not make employment decisions in a spaceless world. Their choice of location, work and partnership, together with fertility decisions, are all highly interconnected. It is the nature of that interconnection and its implications for urban settlement that constitutes the on-going research challenge.

There are, however, well known limitations to drawing inferences from cross sectional data, especially when it comes to understanding highly dynamic behaviour such as labour participation. While there are clues in the above results to the possible influence of timing in both the labour and partnership markets, any attempt to draw *causal* inferences about these interrelated processes is going to require access to appropriate *longitudinal* data.

As several papers delivered at this twelfth conference have shown, New Zealand researchers will soon be in a strong position to join their overseas colleagues in exploiting rich longitudinal data sets. By modeling migration and labour market entry, fertility and education decisions as related, sequential decisions in which *timing* plays an important role, geographers and other social scientists will be better able advance their understanding of the role that *place* plays in market engagement. Such advances will also allow other disciplines to include space in their models with a much greater degree of confidence as to its likely role in mediating the labour engagement process.

Finally, using the conventional breakpoints of 0 and 1 hours of work and over and below 30 hours is still required if cross tabulations are the only form in which data are readily available. But this dichotomization hardly begins to exploit the much richer information we actually have available from the census on hours worked. While the number of cross tabulations permissible by Statistics New Zealand has restricted full use of hours worked in this study, access to unit record data in future should allow a much better understanding of the role of partnership on the hours worked by women as well as the geography of female participation itself. The 2006 census offers many new opportunities in this respect.

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Notes

¹ The recent OECD 2005 Economic Survey highlighted that while New Zealand's overall female participation is comparatively high by international standards, it has one of the lowest rates of employment among mothers with children under the age of six years in the OECD **OECD** (2005). Economic survey of New Zealand 2005: raising female labour force participation, OECD..

² Although not widely used there are distinct advantages in exploring relationships in a multivariate way using such cross tabulations, apart from the fact that they are a fraction of the price and can be run very quickly by SNZ. Both time and dollar costs are considerably lower than obtaining access to unit records through the SNZ data analysis lab. Cross tabulations in 'folded' form to which weighted least squares can be applied are therefore ideal for graduate student work. Other examples in which a 'synthetic' individual level sample of workers were used to obtain estimates of disaggregated groups from cross-tabulated data **Morrison, P. S., K. L. Papps, et al.** (2006). "Wages, employment, labour turnover and the accessibility of local labour markets." *Labour Economics* **13**: 639-663.. For an example using four successive census years to make up a panel data set see **Morrison, P. S.** (2005). Changing patterns of home ownership in New Zealand, 1991 to 2001. Wellington, Report to DTZ for Centre for Housing Research (CHRANZ): 1-63.. Other examples of the use of high-dimensional cross tabulations on New Zealand data include **Harris, R.** (1992). "Ethnicity, gender and labour supply in New Zealand 1986." *New Zealand Economic Papers* **26**(2): 199-218..

³ This table includes all those cells with at least one observation, one women present (randomly rounded to 3). We experimented with this threshold and found that setting the minimum cell size to 6, 9, 12 or even 15 made little difference to the overall conclusions we draw from these analyses and have therefore returned to the original number of cells, 5476.

⁴ A fairly full discussion of the hours of work distribution of both men and women was published as Appendix 5.1 in Morrison **Morrison, P. S.** (1989). Labour adjustment in metropolitan regions. Wellington, Institute of Policy Studies and VUW Press.. This still serves as a useful qualification to the dichotomous measures used here. Paid work definitions undoubtedly understate the participation of women in productive work in general, not just housework but any caring of children or adults outside the household in which reciprocity rather than monetary payment takes place. A much more nuanced picture of the extent of 'work' undertaken by both men and women could be obtained from the Time Use Survey. For this study we are limited by the largely international conventions that govern the questionnaire structure of the census of population and dwellings.

⁵ Our definition also excludes the Not Applicable response in the Census question. Unemployment rates are considered separately.

⁶ The rationale for including regions or location identifiers in general is often quite limited or unidimensional. Take for example the single rationale applied in a recent Treasury paper: "It is expected that the fixed cost of working is different for people in or outside our larger cities and in or out of more remote areas, in particular for people with children who may need childcare services" **Kalb, G. and R. Scutella** (2003). New Zealand labour supply from 1991-2001: an analysis based on a discrete choice structural utility model. New Zealand Treasury Working Paper 03/23. Wellington, The Treasury.. This may well be true, but there are many other components to the regional context that can affect participation rates. The fact that (in New Zealand particularly) 'the region' is a poor proxy for access to metropolitan labour markets is one of the reasons for the use of Settlement Types in our paper.

⁷ Note that Statistics New Zealand uses the 2001 census to undertake this classification and, by using the 1996 census, we are implicitly assuming its appropriateness for conditions five years earlier. For details of the classification see Statistics New Zealand **Statistics New Zealand** (2005). New Zealand: an urban/rural profile. Wellington.. The resulting map may be found in <http://www.stats.govt.nz/urban-rural-profiles/default.htm>

⁸ We acknowledge the valuable conversations we have had with Robert Didham, Statistics New Zealand, on this typology and acknowledge the instrumental role he had in bringing the (re) classification to our attention.

⁹ The other approach is to use local labour markets. These are locationally specific and are defined on the basis of inward and outward commuting patterns **Papps, K. L. and J. O. Newell** (2002). Identifying functional labour market areas in New Zealand: a reconnaissance study using travel-to-work data. Bonn, Institute for Study of Labour..

¹⁰ Experimentation with the 'not specified' showed its inclusion in the base had little effect on the estimates presented below.

¹¹ Of the approximately one million women of working age represented in the data, 86 percent live in urban settlements.

¹² We tested for the statistical significance of these differences by running the settlement location variables in equation 1 only. Each settlement type was identified as a dummy (0,1) variable and compared against the Main Urban Areas, Table 3. The lower Satellite and Independent urban communities participation rates are statistically significant as are the higher rates for the rural areas with high urban influence.

¹³ The distribution of hours worked by women is a far more complex issue than is normally acknowledged and the dimensions of the question are probably best explored in depth through the Time Use Survey **Callister, P. and S. Dixon** (2006). New Zealanders' working time and home work patterns: evidence from the Time Use Survey. Occasional Paper 2001/5. Wellington Department of Labour, Labour Market Policy Group ; also see **Callister, P.** (2005). The changing distribution of paid and unpaid work in New Zealand. W. o. L. F. P. a. E. G.-A. Wellington. Wellington Institute of Policy Studies, Victoria University of Wellington: 33, **Callister, P.** (2005). "Overworked families? Changes in paid working hours of families with young children, 1986 to 2001." Social Policy Journal of New Zealand **24**: 160-284..

¹⁴ The odds ratio coefficients are the log of the odds ratio coefficients exponentiated, ie. e^{β} .

¹⁵ Composition and context are related of course; those seeking fulltime employment would be much more likely to locate in main urban areas so certain compositions are correlated with certain contexts. Correspondingly, those women seeking a life style that does not necessarily include employment such as the retired may seek locations more consistent with that lifestyle.

¹⁶ The seminal paper here is Becker **Becker, G. S.** (1973). "A theory of marriage: part 1." The Journal of Political Economy **81**(4): 813-846.. It is worth noting our preferred use of the term 'partner' rather than 'marital status', and how this mirrors exactly Becker's own intent in what he nevertheless calls, 'A theory of marriage'. "Marriage," he explains, "simply means that two persons M and F share the same household (p 815) and "differs from the legal definition [to] include persons in "consensual" and casual unions and excludes legally married persons who are separated" **Becker, G. S.** (1973). "A theory of marriage: part 1." The Journal of Political Economy **81**(4): 813-846.. The point to make here of course is that the majority of empirical studies which only use marital status in their equations are quite inconsistent with this theoretical position even when they refer to Becker. The result is an unacknowledged degree of measurement error on the partnership variable for increasingly, married women are a declining and quite unrepresentative subset of all partnered women. We have avoided this confusion by not only employing the more current term 'partner' both conceptually but in the way we asked Statistics New Zealand to construct the partnership variable.

¹⁷ Our analysis is confined to male partners. It would be of interest to extend this to an assessment of the labour impact of female partners although there will be a problem of small numbers.

¹⁸ This association is now well documented in the international literature **Pencavel, J.** (1998). "Assortative mating by schooling and the work behaviour of wives and husbands." *The American Economic Review* **88**(2): 326-329.. Nevertheless Pencavel makes the point that rarely has the research on the market work decisions of husbands and wives and their marital choices been brought together. See also Liu and Zhang **Liu, P.-W. and J. Zhang** (1999). "Assortative mating versus the cross-productivity effect." *Applied Economics Letters* **6**(8): 523-525.. However also see early work by sociologists on dual career families **Rapoport, R. and R. Rapoport** (1976). *Dual-career families re-examined*. London, Martin Robinson..

¹⁹ A related connection is between the marriage market and poverty **Cancian, M., S. Danziger, et al.** (1993). Working wives and family income inequality among married couples. *Uneven tides, rising inequity in America*. S. H. Danziger and P. Gottschalk. New York, Russell Sage Foundation: 195-222..

²⁰ The conventional way of specifying the additional attributes of partners would be to add an employed partner term in the equation which has the working partner variable included. However the vast majority of partners *are* employed and including both in the same equation forces the rejection of the working partner variable in this case.

²¹ This could be for both labour and non-market reasons; see **Pencavel, J.** (1998). "Assortative mating by schooling and the work behaviour of wives and husbands." *The American Economic Review* **88**(2): 326-329.

²² Becker's distinction between the labour of partners being complementary or substituting is relevant here, *op cit*.

²³ For a sociological take on this issue driven by a concern over the relationship between propinquity and homogamy see the early paper by Ramsey **Ramsey, N. R.** (1966). "Assortative mating and the structure of cities." *American Sociological Review* **31**(6): 773-786.

USE OF TEMPORARY NURSE MECHANISMS BY NEW ZEALAND'S DISTRICT HEALTH BOARDS

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Abstract

Nursing shortages is a concern globally, and in this context has emerged a research focus on reasons and costs of turnover and retention. A national study on the costs of nursing turnover in New Zealand public hospitals was conducted between 2004-2006, with 12 month's data collected per randomly selected unit. Annual turnover rates were found to be high at average 39.16%, with a range of between 13.83% and 73.17%. Budgeted nurse staffing per unit is expected to be sufficient to deliver nursing work for the patient population (occupancy, acuity and complexity) and provide for leave (annual, sick, study, family, bereavement etc). In the context of the study, it was assumed that temporary cover mechanisms were mainly to cover vacancies and occasional unplanned contingencies such as influenza affecting staff, and higher than normal demands for nursing work. The cost of temporary cover would therefore be a cost of turnover. An unexpected finding of the study was that temporary cover mechanisms were widely used, including when actual staff numbers were equal to or exceeded budget, and no consistent relationship with vacancies was evident. It was concluded that management of the nursing resource was driven by cost, not strategic considerations. Published research on use of temporary cover and the effect of such practices on turnover of nurses provided a perspective to critique the finding.

Introduction

The single largest health professional workforce in hospitals, both numerically and as a proportion of the total wage bill, is its nursing services. The nature of nursing work and demand on nursing services complicates efficient budgeting and deployment, because nursing work is characterized by its non-deferrable nature and unpredictable volumes arising from fluctuations in acuity and demand. Budgeting for nursing full time equivalent numbers (FTEs) must take into account employment contracts provisions (eg annual, sick and bereavement leave, hours of work per shift and per week). In New Zealand public hospitals nursing working conditions are covered by the NZNO-DHB MECA agreement.

This paper reports on an aspect of data that was collected from a national sample of nursing units in New Zealand public hospitals participating in the Cost of Nursing

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Turnover study (North et al. 2005). Unexpected findings of the study were the widespread lower levels of actual permanent RN staff (reported as FTE) than budgeted, and the high use of temporary cover mechanisms. Use of temporary cover occurred not only to cover vacancies, as anticipated, but also occurred when RN FTE staffing was equal to or exceeded budgeted levels. The finding raised questions about the adequacy of RN staffing levels to deliver nursing services and led to a conclusion that management of the nursing resource is driven by considerations of cost, not strategic considerations.

Regarding the statutory context there are two primary considerations. First, District Health Boards in New Zealand have statutory obligations to provide the best health care and support services to New Zealanders in a fiscally prudent manner (Public Health & Disability Act 2000). This implies that DHB owned facilities including hospitals should provide services that are competent, safe, and of high quality. Second, as employers DHBs are also responsible for employee health and safety and for making sure the work done by employees is safe and healthy (Health and Safety in Employment Act 1992 & 2002).

Previous Research

The use of temporary cover mechanisms in nursing to cover vacancies, shortages, leave, higher patient volumes and acuity is attracting researcher attention. An *a priori* consideration, however, concerns the adequacy of nurse staffing and nursing workforce management in the first place. A five-country study in the late 1990s that surveyed over 43,000 nurses showed high levels of job dissatisfaction (between 32.9-41% in 4 of the 5 countries), scores in the high burnout range for 29.1-43.2% in those 4 countries, and corresponding high rates of intent to leave, up to about 46%. Only about a third of respondents in each country agreed that levels of RN staffing were sufficient to provide high quality care and to get the job done. Correspondingly high levels, up to 83.2%, reported an increase in patient load (Aiken et al. 2001). Further analysis of the USA sample demonstrated that, after adjusting for patient and hospital characteristics, each additional patient assigned to a nurse increased by 7% the risk of death within 30 days of admission and failure to rescue; risk to the nurse of burnout increased by 23% and job dissatisfaction by 15% (Aiken et al. 2002).

These concerns have also been found in New Zealand; where research indicates that 30-40% of nurses consistently intend to leave their job within 12 months (Cobden-Graince & Walker 2002; Finlayson & Gower 2002). Persistently high job stress and dissatisfaction are not surprisingly reflected in RN recruitment and retention difficulties, reported by the Department of Labour (DoL) (2005). A survey of employers, who had recently advertised vacancies in 2004, showed that there were few suitable applicants per vacancy (1.1 applications per vacancy), and only 63% of vacancies were filled within 8-10 weeks of advertising, meaning that existing staff and temporary nurses would be covering unfilled positions. Moreover, those advertised vacancies were for existing, not newly created, positions, suggesting that turnover is high. Lending support to nurses' complaints of being overworked, the DoL reported that employment of RNs grew by only 0.8% per annum in the decade 1991-2001, low compared to employment growth of doctors (2.8%) and other health professionals (2.1%).

Accompanying increased nurse workload and attendant outcomes for patients (increased mortality) and nurses (job dissatisfaction, burnout and intent to leave) has been a reported escalation in the use of and dependence on temporary cover mechanisms internationally. Research has found that temporary cover mechanisms are employed to manage chronic shortages of nurses, retention and recruitment difficulties, staff absences, a hiatus of 2-3 months between a leaving nurse's position being refilled, and variations in patient volume and acuity (Berney et al 2005; Buchan & Thomas, 1995; Cardona & Bernreuter 1996; Manias et al 2003).

Also significant is that these developments have taken place in a context of increasing casualisation of the work force generally. This workforce casualisation has also affected nursing, reflecting what are seen as prohibitive costs of a 100% staffing model (Peerson et al 2002). It has also resulted in a trend toward "dejobbing", that is a fundamental shift from seeing one's self as occupying a position to contracting one's skills to meet work needs (Strasen & Brock 1998). However, research has shown that temporary cover mechanisms are no panacea. Seen as an easy way of reducing costs and increasing flexibility, criticisms of temporary cover mechanisms commonly employed include (Berney et al 2005; Buchan & Thomas, 1995; Manias et al 2003; Mayer & Siegel 1996; Peerson et al 2002)

:

- reduced continuity of care
- variable quality of temporary staff and concerns over continuing education
- reduced quality of care and increased risk of liability
- increased management time to arrange cover;
- reduced morale of permanent staff
- fatigue and burnout of permanent staff working overtime and assisting temporary nurses
- irregular and unknown exposure to continuing education.

On the other hand, research has also pointed to advantages which include the greater flexibility of managing staffing to manage fluctuations in demand and associated reduced costs, ability to manage chronic vacancies and short term absences, improved flexibility and other benefits for the agency nurses themselves (Buchan & Thomas, 1995; Manias et al 2003; Peerson et al 2002).

Ways of providing temporary cover vary and reflect three main mechanisms. One mechanism concerns the use of overtime, a practice related to fatigue and the stress of overwork. Using hospital operating cost data, a USA study showed that overtime use increased by between 35-40% during 1995-2000. While nurses worked an average weekly overtime of 4.5% of total hours, this included some nurses who worked up to 16.6% weekly overtime (Berney, Needleman & Kover 2005). A second mechanism employed is the use of an in-house nursing resource variously referred to as a nurse bank or bureau, float team or resource team. This was found to be widespread in a survey of Scottish hospitals to improve flexibility and save on staff benefits (Buchan & Thomas 1995). Savings on staff benefits are contestable in the light of a landmark UK employment tribunal decision awarding benefits on the basis of similar work for the organisation, irrespective of temporary or permanent status (Anonymous 2006). A third commonly used mechanism is the use of nurses employed not by the hospital but by an external agency. A 2002 survey in Melbourne (Peerson et al 2002; Manias et al 2003) uncovered high utilisation of agencies along with concerns over the difficulties

in matching the qualifications and experience of the agency nurse to the needs of the contracting nursing service. Agency nurse use was higher where units were busy, where patient demand was fluctuating, in specialty areas with recruitment and retention problems, and where there were no permanent night staff (all staff rotated), but use was lower where staffing was stable. In spite of concerns over use of agency nurses, health organisations were nevertheless dependent on them to manage vacancies, shortages, absences and variable patient volumes and acuity.

Few authors have addressed the issue of solutions. An exception is an evaluated trial of a policy decision to "over hire", that is to employ excess numbers of nurses, in that case new graduates, to reduce the number of vacancies resulting from the hiatus between a nurse's resignation and replacement (Cardona & Bernreuter 1996). The study identified several benefits of over-hiring:

- historical costs of temporary staff and overtime were much higher than wages for the over-hires
- likelihood of closing beds was reduced
- liability risks were reduced
- staff morale and loyalty was increased
- stability of the nursing workforce and strategic workforce management were enhanced.

In the UK, a recently published document sets out a series of best practices for managing temporary nursing staff, urging a strategic approach to use of temporary nurses in place of an *ad hoc* dependence to manage shortages and recruitment and retention difficulties (National Audit Office 2006). A strategic approach requires data on work arrangements and staff usage: on usage patterns and trends, costs, reasons for use and relation to variables such as patient volume and acuity, seasons and days, turnover and vacancies. Also required are that the setting of and filling nurse establishments are realistic, including clear policies and decision guidelines to govern the use of temporary staff.

What, then, is the situation in New Zealand? Are nursing workforces managed strategically, as reflected in budgeted staffing levels, actual levels employed, reasons for and levels of use of temporary cover mechanisms? These are issues explored by analysing data collected for the Cost of Nursing Turnover study.

Methods

The data used for this paper were collected as part of the New Zealand Cost of Nursing Turnover Study, conducted between 2004-2006 to determine the actual costs of nursing turnover, and the impacts on patient and nurse outcomes (North et al. 2005). The study used a protocol developed in Britain, was pilot tested by six countries including New Zealand (see Hayes et al 2006; O'Brien-Pallas et al 2006; North & Hughes, 2006). In New Zealand after receiving ethical approval, 22 randomly selected general medical and surgical units participated in the study but three did not complete data collection and have been excluded from the analysis (a completion rate of 86.4%). Information regarding nurse staffing models and practices (and other information) was collected from each unit at the start of the study. Data on temporary cover mechanisms, assumed in the protocol to be used primarily to cover

vacancies, were collected systematically and longitudinally over a period of 12 months per ward. All unit managers participated in a series of follow-up telephone interviews when they commented on and offered explanations on some of the results for their unit.

Results

In presenting the results, the article starts by describing the context of nursing work in terms of occupancy rates and nurse staffing practices. Then data on RN budgeted and actual FTE are presented. Turnover rates are reported and a correlation between FTE deficit and turnover demonstrated. Finally, temporary staffing practices, as a means to bridge the gap between demand and supply of nursing services, are reported. Unit managers' comments and explanations of the way nursing levels are set and temporary cover mechanisms used go some way to understanding staffing practices but do not satisfactorily explain the motivation for those practices.

Resourced beds and occupancy

Table 1 shows the number of resourced beds (average 25.57) and occupancy rates (average 91.8%). In many of the units, there were additional unfunded beds, and these beds were also used as required to meet demand. Occupancy that exceeded 100% showed that a given bed was occupied by more than one patient in a 24 hour period. Average registered nursing care hours per patient per 24 hours were 4.99 hours. In some units, the figure was precise when appropriate software was used, while in other units, the figure was calculated based on average nurse and patient numbers.

Staffing of units and nurse staffing practices

Nursing budgets covered the following staff: unit manager (usually termed charge nurse); advanced clinical roles (clinical nurse specialists and educators); staff nurses covering four levels; unregulated roles (health care assistants, nurse assistants, enrolled nurses).

Table 1: Resourced beds, occupancy rates and daily hours of care

Resourced beds	Average occupancy	Ave RN hours per patient per 24 hours
Mean 25.57	Mean 91.8%	Mean: 4.99
Range 19.08 -47.33	Range 73%-109.1%	Range 3.07-9.8

As can be seen from Table 2, units were managed by charge nurses at 1 FTE per unit, with the support of a small number of advanced nurses-clinical nurse specialists and clinical nurse educators. Normally, these advanced roles did not carry a patient load. To deliver direct patient care services, units were staffed by a mix of RNs working as staff nurses, with the assistance of unregulated roles (health care assistants, nurse assistants). In addition nursing staff were supported in delivering patient care with housekeeping support and allied health services, neither of which came from the nursing budget.

In 1 ward, nurses worked 2x12 hour shifts while in all other wards, nurses were rostered on 3x8 hour shifts. Typically, in day shifts, there were 6 RNs + 1 unregistered health care assistant or enrolled nurse, and on night shifts, there were 2-3 RNs and 1 unregistered health care assistant.

Table 2: Nursing Staff of units in FTE per unit

Unit manager	Clinical nurse specialist	Clinical nurse educator	Staff nurses	Unregulated
All units	6/20 units	12/20 units	All units	All units
1FTE	0.5-4 FTE	0.3-1 FTE	14.3 - 45.63	0.5-14 FTE

Budgeted and actual RN FTE

When budgeting for the FTEs of RN staff nurses, the following factors need to be considered:

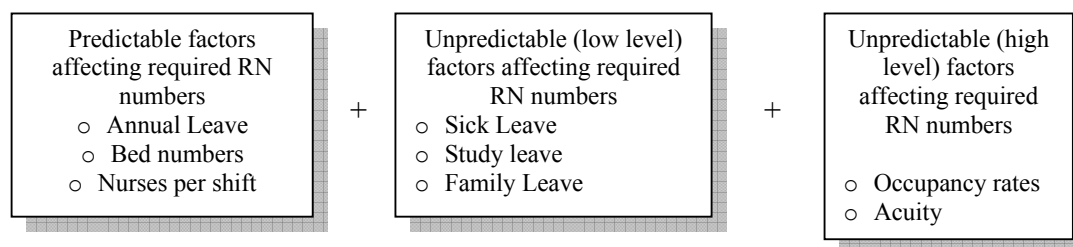


Table 3 shows data on full time equivalents (FTE) of Registered Nurses (staff nurses). The mean budgeted FTE was 25.87 and mean actual RN FTE was 24.05 (median 25.48), with a range of 14.61-38.52. The difference between budgeted and actual FTE was on average -1.88 (median -1.74), with a range per ward per month from -7.2 to +2.26.

Table 3: The average budgeted and actual FTE

	Budgeted FTE	Actual FTE	Difference between budgeted & actual FTE
Mean	25.87	24.05	-1.88
Range	14.3-45.63	14.61-38.52	-7.2 - +2.26

The relationship between budgeted and actual RN FTE became a focus of discussion in follow-up interviews where researchers presented and analysed provisional results with unit managers and nurse leaders. Budgeted RN levels were set annually by management staff, and unit managers confirmed that the levels were expected to include annual leave and provide for sick and other unanticipated leave requirements. Few unit managers were involved in setting the budgeted RN level beyond being briefly consulted. Some did not know how the budget was arrived at and many felt that historical budgeted levels were no longer adequate to meet usual volumes and the generally high acuity levels that many unit managers stressed had increased along with a shorter length of stay.

In spite of their views that budgeted FTEs were inadequate, it is also important to stress the negative difference between budgeted and actual RN FTE (an average of -1.88 FTE, with a range to -7.2 FTE). Unit managers were asked why actual RNs tended to be lower than budgeted. In many cases, this was because RNs had left and there were delays in filling the vacancy, reflecting both the time it takes to fill a vacancy and difficulties in finding a replacement (see also DoL 2005). However, a few DHBs or wards preferred not to staff the ward to the budgeted level for various other reasons. This practice gave them greater flexibility to staff according to variable demand; to help manage costs within the budget; to minimise the risk of RNs being redeployed on a shift by shift basis (a practice nurses disliked); and that RN budget savings allowed unit managers to purchase other services such as unregulated staff to support nurses.

Interestingly, there were also a few units where actual FTEs exceeded the budget. Those unit managers claimed that their primary concern was to provide a safe working environment both for patients and staff and this over-rode budget concerns. They also believed the budgeted FTE was inadequate and by consistently exceeding the budget delivered a message to managers responsible for setting the budget.

As discussed below, this paper focuses on situations when actual RN levels were inadequate and where temporary cover mechanisms were used to cover the shortages.

Turnover Rates

The turnover rate of the sample of units over one year was calculated per ward based on the following information:

1. FTE: average budgeted FTE levels per ward were 25.87.
2. FTE Leavers: the total number of RNs who left the primary place of employment in the 12 month study period was 192.6 FTE.
3. Wards: the total number of wards was 19.

The average national turnover rate after 12 months of data collection for all 19 wards was 39.16% with a range of 13.83% to 73.17%. The turnover rate is artificially raised by the required 6 month rotations of new graduate RNs. If the total number of leavers is reduced by deducting new graduate second rotation figures (24), the average turnover rate falls to around 34.38% (see Table 4).

Table 4: Turnover rates %

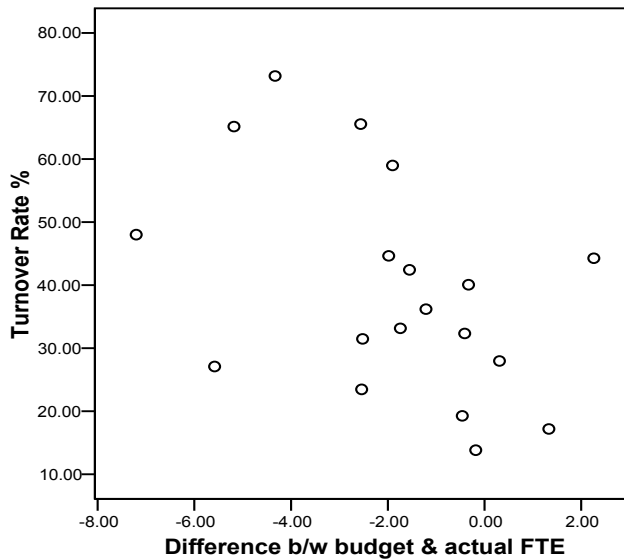
Mean	Max.	Min.	Total FTE leavers	Total FTE joiners	Mean excl. NG 2nd
39.16	73.17	13.83	192.6	268	34.38

A total of 192.6 FTE in 19 units left during the 12 months of data collection. Noting that the mean budgeted RN FTE per ward was 25.87, the national average for one ward in one year was 10.14 leavers, with a range from 3.5 to 21.6, representing an annual turnover of nearly 40% of its RN staff. During the same period, a total of 268 RNs joined the participating wards, giving an average of 13.4 new RNs per year per ward. Unit managers were asked whether the turnover in their ward in the 12 month data collection period was unusual. In many cases, the rate reflected normal patterns. Others remarked that the turnover rate in the study period was unusually high and offered explanations: organisational change or restructuring had occurred around the time of the study; occupancy and acuity had been particularly high; and the environment stressful.

Relationship between turnover and FTE deficits

The relationship between turnover and FTE deficits was investigated using Spearman's rank order correlation. There was a medium, negative correlation between the two variables [$r = -.474$, $n=19$, $p<.040$], with high levels of turnover associated with lower levels of staffing. That is, as actual FTE decreases below the budgeted FTE, turnover increases. Fig. 2 shows a scatter gram demonstrating the relationship between higher turnover with lower actual FTE against budgeted FTE.

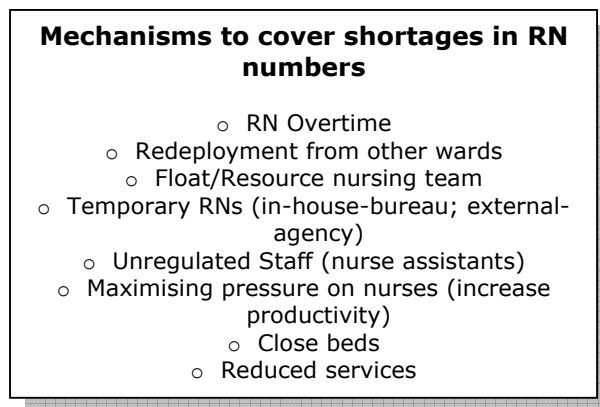
Fig.2: Scatter gram showing the negative relationship between turnover and the difference between budgeted and actual FTE



Use of temporary cover mechanisms

When permanent rostered RN staff nurses were insufficient to meet demand for nursing services, temporary cover was used. All units used temporary cover, though the mechanisms and the purpose varied. Figure 3 shows the variety of mechanisms employed.

Fig.3: Temporary cover mechanisms used



Overtime by permanent staff was commonly used, frequently involving permanent part-time staff nurses and also full-time nurses. Redeployment on a shift by shift basis from other units under less pressure was also widely used. The “float” or “resource” team refers to a pool of permanent employees who, like permanent staff nurses allocated to wards, are guaranteed work to a specified number of weekly hours; however, the nurses work wherever the greater need is. Bureau (in-house) or agency

(external) nurses also work wherever they are sent, but there is no guaranteed amount of work, nor are those nurses obliged to agree to work where and when requested. All hospitals had their internal bureau (other terms used are 'nurse bank' or 'nurse pool') and in metropolitan areas there were external agencies that hospitals could call on. RN substitution or extension by using unregulated staff from a bureau or pool (assistants, patient "watchers") was widely used, sometimes when an RN could not be found, other times when particular patients required the constant presence of an observer, but not necessarily by an RN. When no temporary RN could be found sometimes available nurses simply worked harder, and/or carried out the essential tasks (e.g. medications) while neglecting those tasks that did not risk patient safety (e.g. not administering hot drinks). As a final resort, when RN coverage was deemed too low to assure safety and quality of care, nurse managers had the authority to close beds temporarily or reduce services.

Unit managers differed in their use of and preference for different mechanisms. For example some unit managers avoided redeploying their staff as morale was negatively affected by being moved around at short notice. Others did not like using agency or bureau nurses and would rather use overtime. Some resisted nurse substitution for professional reasons. When unit managers were asked to describe how they managed a RN shortage on a given shift, they mentioned a wide range of approaches based on the above mechanisms but differing on their priorities, preferences and organizational policies.

Costs of temporary cover mechanisms

Different mechanisms carry different dollar costs. For example, it is more expensive to use external agency RNs than the hospital's own employees; increased productivity – that is, doing the same work with fewer staff - and redeployment do not show up on the balance sheet as a cost. In addition, a common practice is for shifting RNs between wards: RNs working in wards that on a given shift are not busy can be moved temporarily to another ward that on a given shift is short of staff. This latter practice is seldom included in the calculation, but nevertheless carries a potential cost in its effect on staff health and job satisfaction. Closing beds and reducing services are not reflected in unit manager cost centre figures, although the costs related to loss of revenue, public confidence and expensive fixed assets lying idle is high.

On this background, the dollar costs associated with temporary cover mechanisms were calculated to include:

- actual amount spent on temporary nurses;
- overtime;
- cost of time spent to arrange cover; and
- cost of time related to permanent staff introducing temporary staff to unit and in assisting or explaining things.

The detailed calculations associated with the various temporary cover mechanisms are presented in the following sections and then costs associated with the provision of temporary cover are summarized in Table 5.

Temporary nursing staff - an average of \$173,201 was spent on temporary cover per ward per year (median \$161,197), with a range of \$31,743 - \$374,152. These costs were calculated based on actual amounts spent providing temporary staffing, including internal float or resource teams, internal bureau/pool, and external agency.

Overtime - an average of \$11,028 was spent on overtime per ward per year (median \$2,904), with a range of \$0.00 - \$93,893. Duration ranged from an hour or two to full shifts, with instances of double shifts being worked.

Administrative and management time to arrange temporary cover – an average of \$11,813 per ward per year (median \$12,227), with a range of \$3,878 - \$22,461. The cost was calculated on amount of time spent on a daily basis by unit and other nurse managers, internal nursing bureau personnel and administrators multiplied by their hourly rates. Administrative practices varied considerably across DHBs: large DHBs had dedicated offices or personnel purely for the arrangement of temporary nursing staffing and smaller DHBs one to two persons dedicated to that task; other DHBs relied on the unit manager concerned to arrange the cover.

Cost of time for permanent staff to assist/ advise temporary staff – an average of \$4,369 per ward per year, with a range of \$0.00 - \$15,201. The cost was calculated based on real-time recording of permanent RN staff time and level over the 12 month period. Costs associated with the provision of temporary cover are summarised on Table 5.

Table 5: Average costs per unit per year associated with temporary cover

	Mean	Range
Temporary Nursing Staff	\$173,201	\$31,743- \$374,152
Overtime	\$11,028	\$0.00-\$93,893
Time arranging temporary staff	\$11,813	\$3,878-\$22,461
Time assisting temporary staff	\$4,369	\$0.00-\$15,201
TOTALS	\$196,482.2	\$35,621-\$505,707

On exploring the high amounts spent on temporary staffing with participating unit managers, many raised concerns that temporary staffing mechanisms are not only to cover vacancies and therefore should not be a turnover cost. In many DHBs, temporary cover was primarily used for other purposes including: sick leave, other leave such as bereavement leave and study leave, and higher than normal acuity and workload. Temporary cover was used for leave though budgeted RN levels in wards were deemed sufficient to cover workload and leave. However, there was considerable variation reported; some claimed only a small level or none was used to cover vacancies with most used to cover sick leave and the like; others said that temporary cover mechanisms were only or mostly used for vacancies and shortages. Further complicating factors were different practices in staffing wards. Some deliberately employed fewer RNs than budgeted for, for such reasons as allowing for greater flexibility to cover fluctuating demand and to manage units within budget. Others endeavoured to employ RNs up to the budgeted level or to exceed the

budgeted level when the budget was deemed inadequate for delivering safe care. Another reported practice was to use the nursing budget flexibly, for example to buy additional health care assistant time. While acknowledging that owing to differing practices and policies temporary cover is used to manage RN staffing, not only to cover vacancies and shortages, it also appeared that in some cases the budgeted level of RNs was insufficient to meet the demand. Based on data and unit manager explanations, use of temporary cover could be ascribed to one of three scenarios:

i. *Scenario 1: budgeted = actual RNs.*

Temporary cover is used for increased acuity, increased volume, increased staff sickness.

ii. *Scenario 2: vacancies result in actual < budgeted.*

Temporary cover is used for increased acuity, increased volume, increased sickness, and vacancies.

iii. *Scenario 3: actual staffing is deliberately < budgeted:*

Temporary cover is used to manage fluctuations as above and to create salary savings.

In Scenario 1, temporary cover is not a cost of turnover; however questions remain about how realistic budgeted staff levels are. In Scenario 2, temporary mechanisms clearly are a direct cost of turnover, but salary savings related to unfilled vacancies need to be deducted from costs. Costs of temporary cover are also a turnover cost in Scenario 3 irrespective of the rationale for the practice.

Discussion

In the participating units, although occupancy rates were high and according to unit managers acuity was also high, there was a mean negative RN staffing against budgeted levels. Furthermore, unit managers widely felt that budgeted RN FTEs were insufficient to deliver safe levels of nursing services for the patient population. New Zealand and international research (Aiken et al, 2001, 2002; Finlayson & Gower 2002) has indicated that nursing is an overworked occupation and this research reflects that there is a high risk of burnout and stress among nurses. It is not surprising, therefore, that employers reported difficulty in filling RN vacancies (DoL, 2005). The Department of Labour has attributed this recruitment difficulty to low numbers of applicants, high turnover, emigration of nursing skills and high occupational detachment (with nurses choosing not to work in nursing).

It was found that temporary cover mechanisms were widely used to cover the negative gap between budgeted and actual RN FTEs combined with high turnover rates. This was an important finding which was further explored with unit managers. A primary concern of unit managers was related to professional issues: concerns were expressed about safe levels of staffing, quality patient care, and pastoral concern for their nurses. However, unit managers were in the invidious position where multiple, often competing, demands intercepted: they were required to manage the unit within budget, to support organisational strategy, to manage quality of care, and they were responsible for health and safety of staff and for professional development of nurses.

Despite these responsibilities, generally unit managers did not strategically or operationally participate in the setting of RN FTEs required to meet demand, nor were they able to fill vacancies quickly and efficiently, leading to their reliance on temporary cover mechanisms.

Mechanisms of temporary cover and costs reflect those reported in literature reviewed (Berney et al 2005; Buchan & Thomas 1995; Manias et al 2001; Peerson et al 2002). These authors also identified drawbacks of temporary cover mechanisms. Working at the point of delivery of nursing services, unit managers were well aware of the drawbacks, but they were seldom in a position to reduce their reliance on temporary cover. Those drawbacks included the demand on manager time and resources, the demand on permanent staff working overtime and assisting external nurses, and the limitations of temporary nurses regarding skills, familiarity with the workplace and productivity. Given these concerns, annual average expenditure at these levels on temporary cover mechanisms is worthy of serious and critical attention with a view to determining how best to use the nursing budget.

The results demonstrate that at an organisational level setting the nursing FTE budget, staffing to the budgeted level and use of temporary cover are largely driven by considerations of costs, not strategic and professional considerations. A wider question, however, regards the costs to which a dollar figure cannot be easily ascribed. These costs reflect the high levels of burnout and job dissatisfaction found in studies cited above, low morale, the difficulties reported by employers in recruiting nurses along with high occupational detachment and emigration by nurses (DoL 2005) and high turnover found in the present study. Instability of nursing workforces and increased patient load, both found in the present study, have been demonstrated to be directly related to higher patient mortality (Aiken et al 2002).

In the light of international experiences, the future supply of a competent nursing workforce cannot be assumed. In Australia, the UK and the USA, where reliance on temporary cover mechanisms – particularly nurses external to the organisation - is much longer and more widespread than in New Zealand, temporary cover has emerged as a focus of research into the use, impacts on both temporary and permanent nurses, and implications for patient care quality. There are specific recommendations arising from such studies (National Audit Office 2006; Manias et al 2001; Peerson et al 2002; Cardona & Bernreuter 1996; Buchan & Thompson 1995; Berney et al 2005) that could usefully inform policy development in New Zealand hospitals. In particular a critical examination of the present nurse staffing levels, the use of temporary cover mechanisms and the development of guidelines governing their use are warranted in the light of findings of the present study.

Conclusions and recommendations

This study provides evidence to guide policy and practice decision making regarding the nursing workforce. In a context of high turnover, reducing supply, an ageing workforce approaching retirement and increased demand for nursing services, an obvious human resource strategy is to focus on retention. However, a working environment that maximises productivity of nurses through flexible use of the nursing resource and budget, extends nurse capacity with the use of unregulated workers, and

relies on temporary cover mechanisms is antithetical to retention. A priority is to establish human resource management systems to determine, monitor, and review appropriate nurse establishments and to manage the use of temporary cover. The impact of current and future patterns of use of temporary cover on key indicators and outcomes needs to be monitored to guard against patient outcomes and the health and safety of nurses being secondary considerations to those of cost.

Acknowledging that use of temporary cover was not the primary focus of the present study, the findings highlight the need for further research. It is important to investigate unit managers' claims that budgeted RN levels are inadequate to do the job. A more focused investigation on the costs and consequences for patients, nurses and health systems, at their broadest, of staffing practices and strategy, related to productivity, flexibility, temporary replacement and nurse substitution, is indicated. And research into nurse retention is required, particularly in the context of an ageing population that is increasing demand for nursing services.

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EMPLOYERS, UNIONS AND WORKPLACE PARTNERSHIP IN NEW ZEALAND

Ian McAndrew¹

Abstract

In 2005 the Partnership Resource Centre of the Department of Labour commissioned a comprehensive review or 'stocktake' of union-management workplace partnership practices and behaviours in New Zealand. The study found that the penetration of partnership practices has been sporadic and/or experimental, set in an environment that is oftentimes abrasive to the concept. Nonetheless, in many workplaces where collective bargaining has existed for a significant period, both unions and management are adopting some key features of a partnership approach. The study concluded that prospects for further penetration of partnership behaviours in unionized firms are positive as the attitudes of many officials on both sides are relatively open to the approach and to the practices it encompasses. This paper offers empirical insights into the attitudes and behaviours of New Zealand employers and union officials in single-employer collective bargaining relationships regarding each other, collective bargaining, other consultative measures, and collaborative versus competitive approaches to their relationships with one another.

Introduction

This paper is the product of a significant research project sponsored by the Partnership Resource Centre (PRC) in the New Zealand Department of Labour (DOL). The PRC sought to describe the current state of workplace partnership in New Zealand employment relations by documenting and analysing contemporary employer-union relationships in action (Ballard & McAndrew 2006).

The core ideas behind partnership include: a collaborative approach to bargaining; wide union and employee consultation practices; a focus on extracting "mutual gains" from negotiations; a preference for consensus over conflict; and, mutual investment in protecting relationships. Partnership, nonetheless, respects the existence of a diversity of interests in the workplace, recognizes the potential for legitimate conflict there, but promotes restraint and protection of the relationship in the management of conflict.

The study involved a comprehensive review of all relevant New Zealand literature and documented case studies. With that background, a theoretical model identifying the antecedent behaviours involved in workplace partnership was developed and from that a structured questionnaire and survey process was completed. This paper summarises the results of the study, with a focus on the survey outcomes.

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The Development of Workplace Partnership Theory & Practice

The term “workplace partnership” incorporates a range of cooperative practices from societal to workplace levels. Today’s interest in partnership arguably derives from several quite diverse concepts and practices. One is the unitarist framework embodied in the employer-initiated, union-excluding “employee involvement” or “employee participation” schemes popularised in Britain and the United States, among other countries, in the 1980s (Marchington & Wilkinson 2000; Wilkinson 2001). Today, they are often supported by a strongly unitarist, managerial rhetoric and a sophisticated suite of high commitment human resources management practices designed to “win minds and hearts” to organizational goals (Guest & Peccei 2001).

In more direct lineage to modern union-management partnerships are several pluralist strands, including one that flows from the post-World War II Western tradition of collective bargaining studied by Bakke and other institutional labour market scholars in the 1940s, ‘50s, ‘60s and ‘70s, particularly in the United States and Britain (Bakke 1946; Flanders 1974; Clegg 1979; Brannen 1983). This tradition is what has been referred to as:

... a minimal *pluralist-voluntarist* sense of partnership as a stable, collaborative relationship between capital and labour, as represented by an independent union, providing for low social conflict and significant worker influence on business decision-making through strong collective bargaining (Ackers & Payne 1998: 533).

This is essentially voluntary, collective bargaining-based cooperation between management and union, with an acknowledgement of some differences of interest between employer and employee, and an acknowledged role for the union as representative of workers, albeit with a de-emphasis on the sort of sustained, overt industrial conflict that often characterized collective bargaining in earlier times and a greater emphasis on seeking consensus through integrative bargaining.

The second relevant pluralist concept is that of “industrial democracy” as embodied in, for example, European Works Councils. The third is partnership in the state corporatist sense, again with roots in Northern Europe and Scandinavia.

While New Zealand has toyed with these latter two concepts, it is really the “voluntarist pluralist” concept of state-enabled, but not mandated, collective bargaining, perhaps with subsidiary consultation mechanisms, and incorporating an independent union voice for employees that would likely offer the most fruitful foundation for workplace partnership in this country. This is essentially the “mutual gains” approach advocated by Kochan and Osterman (1994).

Workplace Relations in New Zealand – The Relevant Short History

For 90 years until the mid-1980s, the New Zealand labour market operated under a compulsory conciliation and contingent arbitration model for the setting of wages and conditions. Though there were some exceptions, this centralised and low-involvement

model offered little opportunity for the development of collaborative workplace relationships between unions and managements.

The Labour Relations Act 1987 (LRA) was intended to provide stimulus to further break down the award-based structures that had been stripped of arbitration backing in 1984, and to experimentation with industry- or enterprise-based, collective bargaining (Harbridge, 1988; Harbridge & McCaw, 1989; McAndrew, 1989). By 1989 the government set up a Committee of Enquiry into Industrial Democracy, giving further articulation and impetus to the notion that unions should be accepted as constructive partners with business in negotiations at industry and enterprise level (McAndrew, 1989: 137).

The structure and nature of employment relations, however, was soon to change dramatically under the Employment Contracts Act 1991 (ECA). Employers now had a relatively free hand and made most of the running, and many employees who had previously been covered by union-negotiated awards were moved onto individual employment contracts. The scope of union representation and influence waned considerably. However, workplace reform did occur in pockets of New Zealand industry during this period, mostly in industries exposed to changing global economics, and it included some examples of union-management co-operation.

With its underpinnings being the promotion of collective bargaining and the obligation of good faith dealing, the Employment Relations Act 2000 (ERA) clearly provides more fertile ground for the growth of union-management partnership than did the legislation that preceded it. The Public Service Association (PSA) Partnership for Quality (PfQ) strategy, implemented in May 2000, was the first explicit and comprehensive attempt by a union in New Zealand to go down a workplace partnership route as a matter of union policy. The PfQ provided a significant impetus for workplace partnership to enter the political and economic agenda, and was a strong catalyst for the government to invest in the Partnership Resource Centre.

There have been occasional high-profile partnership initiatives in the private sector in recent years, perhaps most notably that involving the EPMU and the Dairy Workers Union at Fonterra. But these have come into public view only infrequently, and little was really known about the extent to which partnership-style behaviours and attitudes were prevalent in unionized private-sector workplaces in New Zealand until the present study was commissioned by the PRC.

Methodology

A theoretical model was developed to extrapolate the behaviours which represent workplace partnership in action, allowing the development of appropriate research instruments to measure the extent and type of partnership behaviours that are occurring in New Zealand at this time. The research model is shown graphically in Figure 1.

Figure 1: Theoretical Model of Workplace Partnership



A survey was designed based on the theoretical model. The target population was all employers who, at July 2005, had single-employer collective employment agreements registered with the DOL, and representatives of the trade unions who were party to those agreements. The DOL provided the research team with access to the database containing details of registered collective agreements and parties to those agreements, and also to an existing mail-out database. The database was checked and updated to optimize accuracy and likely returns.

An “online” survey tool was used in the development and conduct of the survey. Two draft surveys were developed; employers and union representatives undertook different but complementary surveys. All potential respondents (employer and union representatives) were sent a letter outlining the purpose of the survey and instructions for accessing the online survey site. The survey population consisted of 904 employers, and 189 union representatives from 52 unions. For the employer survey, 201 responses were received, for a response rate of 22.3 percent. For the union survey, 70 responses were received, for a response rate of 37 percent. A limited list of targeted interview participants was selected from respondents who provided their details to be contacted for follow-up. Twenty employers and five union officials were selected for follow-up interviews, and these were conducted in November 2005.

Survey Results

The employer and union representatives who responded to the targeted survey represented a broad profile of New Zealand industry by sector, size and location. Employers with collective agreements on the whole tend to have larger than average workforces and, accordingly, two-thirds of respondent employers had workforces of more than 100 employees. The results which follow are focused on and ordered as:

- The level of awareness of the concept and practice of workplace partnership;
- The extent that employers and unions are willing to partner with each other and the barriers to partnering; and
- The extent of workplace partnership practice and where and when it happens.

Awareness of Workplace Partnership

To gauge awareness of the concept of union-management workplace partnership, employers were asked whether they had had any experience, in terms of formal processes, with a range of what are generally seen as collaborative practices – “mutual gains bargaining or workplace partnership with a union representing the organization’s employees”, and “workplace reform or consultative approaches to change management”.

Just 12 percent of respondent employers indicated that their organizations had had any experience with mutual gains bargaining or workplace partnership with unions in a formal sense. One quarter indicated that their organizations had experienced workplace reform or consultation over change management.

At a more perceptual level, 70 percent of the respondent employers believed that the employees of their organizations were in partnership with management, while 30 percent did not. Just half as many, 35 percent, believed that the union was in partnership with the management and employees of their organizations.

By contrast with the employers in the sample, a majority of union respondents, 58 percent, said that they had had experience with mutual gains bargaining or workplace partnership systems. About the same number, 61 percent, said that they had had experience with workplace reform processes or consultative approaches to change management.

It might be an accurate summary to say that a majority of union respondents and a minority – albeit a significant minority – of employer respondents have some familiarity with workplace partnership or the notion of union-management cooperation in the workplace more broadly.

Willingness to Partner and Barriers to Partnering

The second dimension of workplace partnership examined is the willingness of union and management parties to engage in partnership and, on the other side of that coin, the barriers to partnering that are likely to be encountered. Eighty-one percent of respondent union officials said that their union saw its role as being a strategic partner in the management of organizations in which members were employed. Of these, one half said that their union strongly endorsed that view, while the rest reported that official union policy was somewhat supportive. Fifty-two percent of union officials agreed “totally” with the statement “unions should be prepared to act in partnership

with an employer where the employer is willing to do the same". Another 34 percent agreed "to some extent", while 15 percent disagreed entirely with that statement. In other words, 85 percent of respondent union officials were prepared, at least to some extent, to engage with employers in workplace partnerships, on a reciprocal basis.

Union officials' personal approaches to employers and collective bargaining are set out in Table 1.

Table 1: Union Officials' Personal Approaches & Beliefs

<i>'Thinking about your personal views as a union/ association representative, please describe the extent to which you agree or disagree with each of the following statements.'</i>	To a large extent %	To some extent %	Not at all %
A union's role is to maximize the direct benefits flowing to its members	87	11	2
Unions should use their bargaining power in an overt manner when required to get what their members want from reluctant employers	40	56	5
Unions should take a longer term view and be prepared to compromise even when they have more bargaining power than the employer	29	56	15
Unions and employers have more common interests than conflicting interests	35	53	11
Industrial action is best avoided unless absolutely necessary	85	11	3
Unions should resist employer attempts at 'changes' which may disrupt the working lives of members	35	58	6
It is OK for union leaders to have a close social relationship with management	8	54	38
Most employers want to do the right thing by their employees	5	84	11
Most employers want to do the right thing by the union	2	55	44
A union should compromise its interests a little rather than damage its relationship with an employer	6	43	51
Having a union involved enhances an employers efficiency and productivity	75	22	3

The picture that emerges from the data is of a group of union respondents overwhelmingly supportive of a partnership approach to union-management relationships, believing that that approach benefits both employees and the employer. Reciprocation by the employer is important to them, and they see the inclinations of the chief executive as pivotal in the development or not of workplace partnership. Employers' disrespecting the role of the union, by bypassing officials and attempting to deal directly with employees, is a turnoff for these union officials. However, their support for partnership is pretty resilient despite sometimes encountering employer conduct and attitudes not conducive to partnership.

Certainly the picture is of a group of union officials who believe that the union has something to contribute to employing organizations, who believe that members would benefit from a collaborative relationship between employer and union, and who are ready to play their part if employers are willing to play theirs.

Employers were asked why they deal with unions representing their employees. In multiple union situations, employers were asked to respond with reference to the

union that represented the largest number of their employees. Their responses are set out in Table 2. While a significant minority of employers acknowledge that union involvement may be beneficial to the organization, this is not a driving motivation to deal with a union for most employers. When asked to choose "the single most influential reason" for dealing with the union, just 11 percent of employers nominated "because it is beneficial to the organization".

One necessary ingredient for successful partnership, but not a sufficient one on its own, is acceptance of a diversity of interests in the workplace and the legitimacy of an independent voice for employees. In this respect, it is noteworthy that 83 percent of employers said that they dealt with a union because that was what their employees wanted, and 43 percent nominated this as the primary reason for dealing with the union.

Precisely 40 percent of respondent employers supported workplace partnership as likely to help New Zealand business, while 60 percent did not, and the responses show some interesting patterns by demographics, employer attitudes, and their reported experiences in dealing with unions.

There were no marked patterns to employers' expressed support for union-management partnerships as being beneficial for business by nature of the employer's business or industry classification, although respondents representing state agency employers were marginally more likely to endorse partnership. Perhaps surprisingly, there were no patterns associated with the nature or scope of competition in markets for employers' products or services, or by self-reported indicators of market or cost pressures.

Employers in Canterbury were most likely (70 percent) to believe that the promotion of workplace partnership would benefit New Zealand businesses, with those in Auckland least likely (28 percent) of employers in major centres. Whereas union officials' support for partnership was directly correlated with their attitudes and beliefs, to some extent withstanding negative experiences with employers, employers' support or not for partnership was more directly and solely tied to their experiences with unions.

To a considerable extent, employers' attitudes to workplace partnership are reflected in their approaches to collective bargaining, and that is unsurprising given the central role of collective bargaining in union-management relations under the Employment Relations Act.

It is instructive to note relationships between some bargaining practices that would normally be associated with a "good faith" or "interest based" approach and a willingness to endorse workplace partnership as being beneficial for business.

For example, employers who said that they always preferred to "brainstorm" with the union over a range of options before taking positions on how particular issues should be settled or dealt with were far more likely to endorse the benefits of partnership (80 percent endorsement) than those who only sometimes (38 percent endorsement) or never did so (28 percent endorsement).

Employers who said that they always “worked to find areas of mutual interest to the organization and the union and to jointly develop proposals in those areas” were more likely to endorse the benefits of partnership (71 percent endorsement) than those who said that they only sometimes (27 percent endorsement) or never (13 percent endorsement) did so.

Table 2: Why Employers Deal With Unions

<i>‘Could you please indicate whether you mostly agree or mostly disagree with each of the following statements about why your organization has a relationship with this union.’</i>	Mostly agree %	Mostly disagree %
Because it can’t easily be avoided	77	23
Because our employees want it	83	17
Because ‘it has always been that way’	63	38
Because it is beneficial to the organization	41	59
Because the law requires it	65	35

On the other side of the coin, employers who said that they always “tried to protect the organization’s interests by limiting the union’s input to just wages and basic employment conditions, not management issues” were less likely to endorse the benefits of partnership (27 percent endorsement) than those who said that they adopted that approach only sometimes or not at all (50 percent endorsement).

A commitment to relationships is a key ingredient in successful partnerships. So it comes as no surprise that employers who said that they were willing to agree to some collective bargaining proposals that they did not particularly like in order to build a better relationship with the union were much more likely to endorse the benefits of partnership (49 percent endorsement) than those who said that they were never willing to do that (3 percent endorsement).

Employers were asked to react to a series of statements designed to gauge their attitudes to unions and collective bargaining. Some of these, principally dealing with employers’ preferences regarding unions, and the statistics on the percentages of respondent employers who agreed and disagreed with each statement, are set out in Table 3.

There were some interesting and statistically significant correlations between attitudes to union involvement and endorsement of workplace partnership as being beneficial to business. For example, employers who said that they consult with the union before making significant decisions – what many would consider a fundamental of workplace partnership – were much more likely to endorse the benefits of partnership (51 percent endorsement) than those who don’t (14 percent endorsement). Employers who agreed that they would to a small extent compromise their interests rather than damage their relationship with the union were more than twice as likely to endorse the benefits of workplace partnership (56 percent endorsement) than those who said that they would not compromise (25 percent endorsement).

Employers who agreed that the union creates a better workplace environment for employees were more likely to endorse partnership (67 percent endorsement) than those who did not agree with that statement (29 percent endorsement). Those who were prepared to go beyond that to say that having union involvement enhances the operation of the business were far more likely to endorse the benefits of workplace partnership (79 percent endorsement) than those who did not agree with that statement (28 percent endorsement).

Table 3: Employer Attitudes to Union Involvement

<i>'Please describe the attitudes or policies of those in your organization mainly responsible for dealing with the union.'</i>	Agree %	Disagree %
We would like to see the union more fully involved in the organization	11	89
The union is a legitimate representative of employees, but not part of our team	77	23
The union is a source of conflict and division in the organization	38	62
The union officials will do the right thing by our organization	37	63
We would prefer to deal less with the union and more directly with employees	76	24
We have an effective relationship with the union and are keen to keep it the way it is	78	22
Our relationship with the union is tense and unproductive	16	84
We consult with the union before making decisions that significantly impact the organization and the way we operate	72	28
We would rather compromise our interests a little than damage our relationship with the union	50	50
We would trust the union to keep commercial information about our organization confidential	59	41
The union is a problem we could do without	32	68
Having union involvement enhances the operation of our business	23	77
The union creates a better workplace environment for employees	30	70
Employees will not achieve anything through the union that management would not have given them anyway	50	50
The union improves the organization's competitive position	9	91

Again, it is clear that employers who have the inclination to be relatively open in their dealings with unions, who are prepared to take the risks associated with openness and trust, and to pay the costs associated with protecting and building the relationship, are more often appreciative of the value of partnership than those who don't have those inclinations and experience. It is also clear that employers' approach to partnership is a largely pragmatic one, not an ideological thing. The employers who most endorse the value of partnership are those who say, from their experience, that it not only benefits their employees, but that it benefits the organization as well.

The study extensively recorded the self-reported attitudes and behaviours of employers. But union officials were also asked about employers' attitudes and behaviours that they had encountered, and that impact on the chances of establishing collaborative relationships. These results are presented in Table 4.

To summarize the theme of Table 4, about three-quarters of union officials said that they either consistently or sometimes encountered a range of attitudes amongst

employers that would not ordinarily be thought of as being conducive to establishing collaborative relationships.

Most union officials had, from their perspectives, to deal – occasionally or often – with employers who were not open to collaboration, who did not believe that unions had anything to contribute, who did not welcome union input into decision-making, who regarded them as outsiders to the management-employee relationship, and who essentially attempted to side-step the union and diminish its role.

These are not insignificant attitudinal barriers confronting a union seeking to establish a partnership relationship with an employer. And it is well to recall that a significant minority (40 percent) of union respondents said that they sometimes encountered resistance to their efforts to forge partnership arrangements with employers from their own members and delegates as well.

Without diminishing the barriers to partnership, the statistics can also be interpreted more hopefully. It is noteworthy that a substantial minority of union officials reported that they were generally not encountering these negative attitudes as a problem in establishing effective relationships with employers.

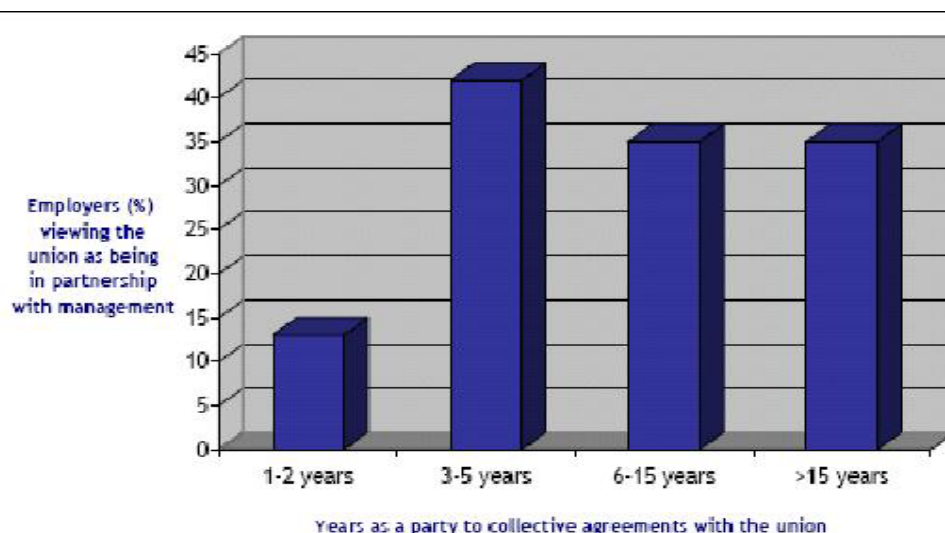
Where is Workplace Partnership Happening?

Generally speaking, demographics do not emerge as a reliable predictor of the practice of workplace partnership. There were some suggestive patterns but no statistically significant variations by the nature of the employing organization, by industry classification, or by workforce size. Partnerships were more likely to be reported by employers with just one or a few worksites than by employers with many sites, and employers in New Zealand's two major cities were the least likely to report being in partnership with a union, although again these relationships were not at a statistically significant level.

Table 4: Union Officials' Perceptions of Employers' Attitudes to Unions

<i>'Please describe the extent to which you have encountered the following problems in trying to establish effective relationships with employers.'</i>	A consistent problem %	Sometimes a problem %	Generally not a problem %
Employers attempt to deal directly with employees even when the union has an established role	16	53	31
Employers are not open to collaborative approaches	11	60	29
Employers assert a right to run their business however they choose to without 'union interference'	23	44	34
Short-term economic imperatives are the single most important factor to employers	29	53	18
Employers do not genuinely want employees or the union to have a real say in the running of the organization	36	51	14
Employers undermine the union's attempts at 'partnership' by establishing direct employee participation schemes that exclude the union	15	42	42

Employers are not really interested in any value that active union involvement could add to the business	23	53	23
Employers insist on treating the union and union officials as 'outsiders' rather than as an integral part of the organization	35	39	26

Figure 2: Partnership by years dealing with the union

All in all, while there were some interesting patterns to the demographics, there is nothing in the data to suggest that partnership is assured of flourishing in one particular location or industry or market or plant configuration, but doomed to fail in others. The link between reported partnership and demographic variables is simply not that strong. It seems reasonable to conclude that there is potential for workplace partnership pretty much anywhere that union and management commit to it.

Employers were also asked how long they had been a party to collective agreements with the union (or, again, the union representing the largest number of their employees where the employer dealt with more than one union). The percentages of employers reporting partnership relationships with unions according to length of time dealing with the union are illustrated in Figure 2.

There is obviously no consistent relationship between felt partnership and length of time working together in the sense that it cannot be said from the data that the longer the period a union and management work together the more likely they are to develop a partnership relationship. However, what is clear from Figure 2 is that a sense of partnership is not prevalent amongst employers in new bargaining relationships with unions. What is apparent on the face of the graph is that partnership takes some time to build. Indeed, 80 percent of employers who said that the unions with which they dealt were in partnership with management and the employees had been parties to collective agreements with those unions for six years or more. And indeed all but one employer describing the union-management relationship as a partnership had dealt with the unions for three years or more.

To summarize, an employer dealing with a single union representing a high percentage of the employer's employees, with the opportunity to develop over time a trusting relationship with a credible union official would seem to reflect some of the key ingredients in the recipe for a successful workplace partnership.

Towards a Model of Workplace Partnership in New Zealand

The deliberate focus of this study was employers with single-employer collective agreements. Employers with multi-employer documents, largely in the public sector, were not included.

Among employers with single employer collectives, the findings suggest that the most likely situation in which to find workplace partnership-type engagement in New Zealand at this time is an employer dealing with one principle union for a single employer collective agreement covering employees throughout the organisation. There are otherwise no very clear patterns by industry or area of the country.

There are few examples of "pure" workplace partnerships evident in this research. In the sub-samples of employers and union officials who report either being in partnership or being inclined towards partnership, actual bargaining and other workplace relations practices tend to be a mixture of some behaviours and attitudes that would be associated with a partnership approach and other behaviours and attitudes that would normally be associated with, perhaps, a more traditional, competitive approach to union-management relations.

It can be inferred from the research that most workplace partnership in New Zealand, at least in the private sector, is "self-taught" or experimental, is not strategically based on a cohesive concept or "theory" of partnership, and is "incomplete" in the sense noted above – parties mix partnership behaviours with more traditional ways of relating to one another. Beyond bargaining and beyond other statutory associations and forums (health and safety committees, for example) no consistent pattern of co-operative relationships or forums emerged, although there were a small number of notable exceptions.

Workplace partnership in New Zealand where it does occur, even in limited form, appears to take time to develop. It also appears to involve some natural ordering of circumstances involving (a) a mature collective bargaining relationship; (b) reasonable relationships between individual representatives of the employer and the union; and, (c) a catalyst initiative from one side or a circumstance requiring broader co-operation or joint discussion outside of bargaining and the usual day-to-day interactions.

One in every three employers surveyed is interested in partnership-type approaches with unions, albeit that the evidence suggests that what they currently envisage is something less than an all-embracing partnership. Many union officials suspect that employers often want partnership "only on their terms". It is clear from the research that employers' views of workplace partnership are very pragmatic and experience-based. Employers who have had good experiences when trying to be more open with

a union tend to be interested in partnership; those who have not, or who have had a bad experience, are less interested or are opposed.

The majority of employers surveyed have what might most accurately be described as a "limited" view of unions. Most respect the right of employees to have representation and accept the role of the union in representing employees. However, relatively few are prepared to go so far as to acknowledge the union as "part of our team." As a result, a lot of union officials report facing a range of attitudes and behaviours from employers that only encourage traditional "position taking" in response.

The experiences and inclinations of on-the-ground union officials are mixed. Less than a quarter think that collaboration with employers is ideologically wrong and a betrayal of the membership. A second group is still dealing with bad experiences in the relatively recent past and these union officials are cautious with many employers with whom they deal, but nonetheless generally open to partnership under the right circumstances. A minority are fully embracing workplace partnership concepts in theory and in practice.

On the whole, however, the data suggest that a significant majority of the union officials surveyed are supportive of partnership approaches on a reciprocal basis (that is, where employers are open to the same) and believe that partnership would benefit their members, the employer, and the New Zealand economy.

Since the shakeout in the early 1990s, the coverage of "real" collective bargaining between unions and employers has remained fairly stable, with only modest growth, despite a decade of hostile legislation and half a decade of quite supportive legislation. That seems unlikely to change substantially as long as legislation allows for, but does not mandate collective bargaining. Accordingly, the realistic ambit for expansion of partnership is the population of existing collective bargaining relationships.

That does not mean that the nature of legislation has no bearing on the matter. The research does support the notion that "good faith" behaviours in collective bargaining, if observed by both parties, are more likely to lead to further open relationships between the parties. What the legislation may actually do these days is not so much determine the spread or shrinkage of collective bargaining, but set the "tone" for the collective bargaining that does exist. In this sense, the ERA goes to the nature of collective bargaining and provides a platform for promoting degrees of workplace partnership over more traditional, competitive styles of interaction.

Finally, if effective collective bargaining is accepted as a key pathway to broader workplace partnership, then government via the DOL has a key role to play. To the extent that the focus in the past has been on interventions in collective bargaining when things go wrong (as they sometimes do) and providing effective dispute resolution, then perhaps the role in the future should go further. The extension would be to promoting improved understanding amongst the industrial parties in New Zealand of 'mutual gains' (or similar) bargaining practices and of broader workplace partnership practices. Perhaps interventions should not end when immediate outcomes are reached in a collective bargaining dispute. Instead this could be followed with longer term assistance to get the parties behaving in a manner whereby the next time

bargaining occurs another dispute is avoided. This change in focus is already emerging in the proactive mandate that the DOL has accepted, for example as the role and guiding philosophy of the Mediation Service, and in the establishment of the PRC.

Conclusions

Among other things, this research has indicated that there is occurring a gradual transition in the way in which some New Zealand employers and unions are interacting with one another, and that this happens most obviously as collective bargaining relationships mature. From employers' perspectives, it appears to be occurring largely pragmatically, while most union officials are more inclined to believe that partnership behaviours and attitudes benefit workers, employers and productivity.

The study opens up a number of avenues for further research, some of which is already in train. The author and colleagues at Otago University are already exploring more closely the links between partnership attitudes and behaviours and employers' employment relations ideologies. Collaborative work with colleagues at Massey University exploring employers' attitudes to collective bargaining is also relevant. However, other research opportunities abound.

With exceptions, it is fair to conclude that most movement towards the adoption of partnership behaviours and attitudes has occurred in New Zealand over the past 15 years, with some acceleration since 2000. Longitudinal replication of this research tracking changing attitudes and behaviours makes some sense.

Union-management partnership is not something valued for its own sakes. It is seen by proponents to enhance employment relationships and the workplace experience, as well as to benefit employer, industry and national productivity and competitiveness. While the present research has tested these outcomes at the level of participant perspectives, hard evidence on partnership outcomes in New Zealand is essentially limited to case studies sponsored and published by the PRC. There is room for much more.

Conventional wisdom holds that partnership behaviours and attitudes are most likely to be found in single-employer, single-union collective bargaining relationships. The scope of this research was defined by that supposition, although as a matter of settling priorities rather than ruling out partnership at other levels of engagement. As multi-employer and multi-union bargaining and documents have assumed greater importance on the industrial landscape, research into bargaining behaviours and attitudes, and outcomes, at those levels is now also required.

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Minimum wage workers in New Zealand: Who are they?

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Abstract

The New Zealand minimum wage rate has recently experienced a sustained period of growth that looks set to continue under the current Labour-led government. Since 2002 the adult minimum wage rate has increased by 28% from \$8 an hour to the current rate of \$10.25. This rise in the minimum wage has outstripped average wages, which increased by 15% over the same period. This paper uses the New Zealand Household Labour Force Survey and its Income Supplement to identify minimum wage workers and describe their demographic and job characteristics. In particular, the paper examines changes in the characteristics of minimum wage workers between 2002 and 2005. Minimum wage workers, over this period, are relatively young (over a half are aged 16-25 years), predominantly female, working part-time and are likely to be employed in a Services and Sales related occupation and in the Retail and Hospitality industries. Between 2002 and 2005 there was a three-fold increase in the share of wage and salary workers identified as minimum wage workers. Minimum wage workers in 2005 were slightly older and more likely to be female, compared with 2002. In particular, the share of married females among minimum wage workers doubled and there was an increase in the share of minimum wage workers in the Health and Community Services industry sector.

Introduction

The New Zealand minimum wage rate has recently experienced a sustained period of growth that looks set to continue under the current Labour-led government. Since 2002 the adult minimum wage rate has increased by 28% (17% in real terms) from \$8 an hour to the current 2006 rate of \$10.25. In her address to the New Zealand Council of Trade Unions (NZCTU) on 18 October 2005, the Prime Minister indicated that "the aspiration over the next four adjustments is to see it move close to \$12 an hour for the adult rate". What is of particularly interest is that since 2002 the minimum wage has outstripped average wages, which increased by 15%².

There has been a substantial amount of debate around the effect of raising the minimum wage on labour market outcomes, in particular employment³. New Zealand studies by Maloney (1995), Chapple (1997) and Maloney and Pacheco (1999) provide mixed evidence that the minimum wage has an adverse impact on employment for specific (vulnerable) groups. Hyslop and Stillman (2004) examined the effect of an unusually large increase (40%-60%) in the minimum wage for young workers aged 16-19 on their employment prospects and labour market outcomes. The study found no immediate effect on the employment rate of 16-19 year olds, but weak evidence of a negative effect on employment two years out from the minimum wage change. Hyslop and Stillman (2004) did find a negative and significant impact on study rates and a positive and significant effect on unemployment rates, benefit receipt and inactivity. Estimating the direction and magnitude of the minimum wage effect is difficult, particularly within New Zealand given currently available data sources (e.g. a short time-series of wage data and relatively small annual changes in the minimum wage). Quasi-experimental approaches that make use of an unusually large change in the minimum

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wage rate, as used by Hyslop and Stillman (2004), can produce robust results, but are a rare event in New Zealand. Hyslop and Stillman (2004) note that the direction of minimum wage research has moved from the assumption that a rise in the minimum wage is always associated with negative employment effects to investigating under what circumstances do negative employment effects occur.

Given that a change in the minimum wage may potentially affect labour market outcomes the purpose of this paper is to identify who is likely to be impacted. In particular, following the recent and relatively large increases in the New Zealand minimum wage, whether there has been a change in the types of workers affected by minimum wage changes.

New Zealand's Minimum Wage Legislation

The New Zealand Minimum Wage legislation⁴ decrees that the minimum wage rate must be reviewed each year by 31st December. Any changes in the minimum are typically implemented in the following March. The New Zealand minimum wage was brought into law in 1983 and set a binding wage floor for all workers aged 20 years or older. In March 1994 a youth minimum wage was introduced for 16-19 year olds and was set at 60% of the adult minimum. On 14th December 2000 it was announced that the eligibility age for the adult minimum wage would be lowered from 20 to 18 years of age and that the youth minimum wage would be increased from 60% to 80% of the adult minimum. The change in the eligibility age for the adult minimum wage was made on 5th March 2001 together with a 10 percentage point increase in the youth minimum wage from 60% to 70% of the adult minimum. On 18th March 2002 the youth minimum wage was increased by a further 10 percentage points from 70% to 80% of the adult minimum.

Data Description

The data used in the analysis in this paper comes from the New Zealand Household Labour Force Survey and its Income Supplement (HLFS-IS). Since 1997, the Income Supplement (also known as the New Zealand Income Survey, NZIS) has been included as an annual supplement to the June quarter HLFS, to collect information on income from a variety of sources. The HLFS sample frame uses an eight-quarter panel, and samples approximately 15,000 households and 30,000 individuals aged 15 and over each quarter. The HLFS-IS collects information on wages and salaries earned in a reference period (typically the week prior to the survey). In addition to collecting information on wages and salaries the HLFS-IS also collects information on the number of hours worked in each wage and salary job (up to a maximum of three jobs) during the reference period related to the reported earnings. Statistics New Zealand (SNZ) convert the information collected on wages and salaries and hours worked to a weekly measure of earnings and hours worked and an hourly wage rate, which are presented as such in the HLFS-IS data extract.

The minimum wage legislation covers all those employed for wages or salaries aged over 16 years of age. For this study we focus on individuals aged 16-64 years, employed in wage and salary jobs (excludes the self-employed). This paper focuses on the years 2002-2005, which covers a period of relatively large and year-on-year increases in the minimum wage. Between 2002-2005, on average, 73.9% of the working age population were in employment, of which nearly 80% are only employed in wage and salary jobs. The differences in the population characteristics of the employed and wage and salary working age population are not particularly large.

To analyse the characteristics of minimum wage workers, it is first necessary to identify workers that are affected by a change in the minimum wage. Interviews for the HLFS-IS are carried out

during the months of April, May and June. The majority of changes to the minimum wage rate are made during the month of March, therefore, all the wage and salary information collected by the HLFS-IS should reflect the recent change in the minimum wage rate. We define minimum wage workers as those being paid between the current minimum wage and next year's minimum wage. For example, using the 2005 HLFS-IS minimum wage workers are those earning between the 2005 minimum wage of \$9.50 for adults and \$7.60 for youth workers (aged 16 and 17 years) and just less than next year's (2006) minimum wage of \$10.25 for adults and \$8.20 for youth workers. This approach excludes workers earning below the current minimum wage. This is done for two reasons. First, the New Zealand Minimum Wage Review, conducted each December by the Department of Labour, uses the same definition for identifying minimum wage workers. Second, this approach enables below minimum wage workers to be analysed separately.⁵ An important problem is that this approach assumes that the hourly wage rates collected by the HLFS-IS are correct. One of the problems with using an hourly wage measure is the amount of noise introduced if the hourly wage is derived using reported gross earnings and hours of work. Measurement error occurs when the number of hours reported does not correctly match the reported earnings. In the 2005 HLFS-IS over two-thirds (65.5%) of respondents had their hourly wage rate derived.

It is likely that the level of measurement error associated with an hourly wage rate that is reported directly by a respondent is lower compared with an hourly wage rate derived using reported gross earnings and usual weekly hours of work. Therefore, it is possible that individuals could be falsely identified as minimum wage workers because their hourly wage has not been measured correctly in the HLFS-IS. However, it would not be sensible in this case to only include individuals that report an hourly wage rate. First, only one-third of the wage and salary sample in the HLFS-IS report an hourly wage rate. Second, it is unlikely that these workers are representative of the population of wage and salary workers because they may reflect jobs that are paid by the hour. There are distinct differences between the characteristics of derived hourly wage workers and reported hourly wage workers. Over the period 2002-2005 derived hourly wage workers are, on average, older, less likely to be female, more likely to be Pakeha and more likely to have a post-school qualification. The job characteristics are also quite different. Derived hourly wage workers are more likely to work full-time and less likely to work in a Services and Sales related occupation and in the Retail and Hospitality industry sectors. Derived hourly wage workers are paid, on average, \$21.18, compared with \$14.20 for workers that report an hourly wage. The remaining analyses will include both derived and reported hourly workers.⁶

Analysis of Minimum Wage Workers

This section examines the impact of minimum wage changes over the period 2002-2005 by describing the population and job characteristics of individuals identified as minimum wage workers. Minimum wage workers are those paid an hourly wage between the current minimum wage and next year's minimum wage.

Minimum wage impacts

Table 1 calculates the number of workers, between 2002 and 2005, that were likely to be affected by a change in the minimum wage. The number of minimum wage workers tripled from 32,700 in 2002 to 96,200 in 2005. This means that at the time of the 2005 HLFS-IS survey it is estimated that 96,200 wage and salary workers were being paid between the 2005 minimum wage of \$9.50 and just less than the next year's (2006) minimum of \$10.25. In comparison the wage and salary workforce increased by only 9.2%, whereas, the share of workers affected by a minimum wage change grew from 2.3% to 6.1%, an increase of nearly 200%. The share of workers that reported

below minimum wages also increased by nearly 50% from 40,200 to 59,700 and made up 3.8% of the wage and salary workforce in 2005. The annual increases in the minimum wage between 2002-03 and 2005-06 were 6.3%, 5.9%, 5.6% and 7.9% respectively. Therefore, it is not necessarily surprising that there were more minimum wage workers identified in 2005, compared with in 2002, because the 2005-06 minimum wage increase was larger than the increase in 2002-03. To test the effect of different sized minimum wage increases between 2002 and 2005 we use the percentage increase in the minimum wage over the period 2002-03 to identify minimum wage workers in 2003, 2004 and 2005. The share of minimum wage workers in 2002, 2003, 2004 and 2005 using the 2002-03 minimum wage increase is 2.3%, 3.1%, 3.7% and 5.7% respectively. This suggests that the density of workers earning just above the minimum wage has increased between 2002 and 2005. In other words a 1% increase in the minimum wage rate in 2005 will affect a larger share of the wage and salary workforce compared with in 2002.

Table 1. Estimated impacts of minimum wage changes

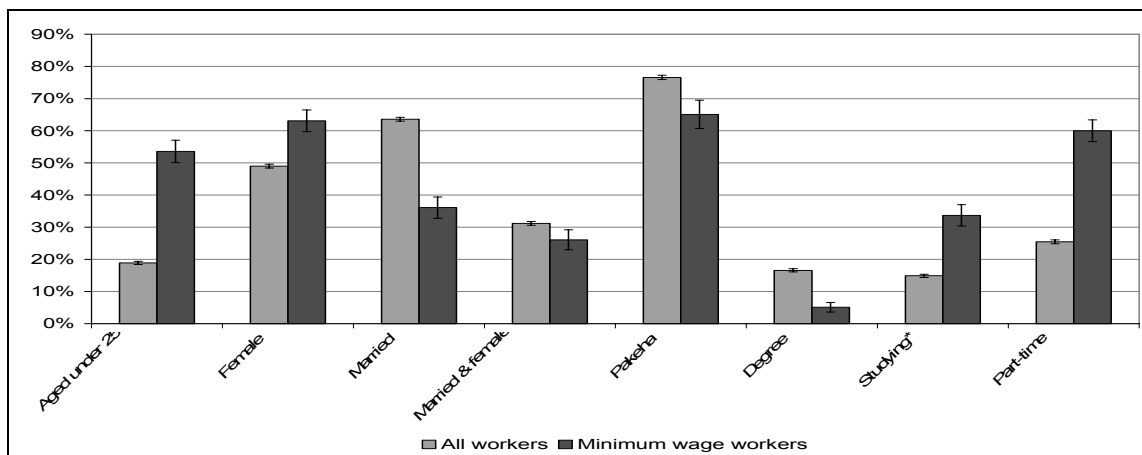
Year	All workers	MW workers	Below MW workers
2002	1,439,000	32,700 (2.3%)	40,200 (2.8%)
2003	1,470,200	26,000 (1.8%)	56,600 (3.8%)
2004	1,525,100	39,000 (2.6%)	45,900 (3.0%)
2005	1,571,600	96,200 (6.1%)	59,700 (3.8%)
Change 02/05	9.2%	194.2%	48.3%

Source: Statistics New Zealand, HLFS-IS

Characteristics of Minimum Wage Workers

Figure 1 compares the demographic and job characteristics for all workers with minimum wage workers. The light grey bar represents all workers and the dark grey bar represents minimum wage workers. The whisker plot on each bar is the confidence interval at the 95% level. Minimum wage workers have an average age of 30 years, compared with 38 years for all workers. In particular, there is a relatively high incidence of minimum wage workers aged under 25 years. For all workers just under 20% are aged 16-24 years, compared with just under half (53.6%) of minimum wage workers. Nearly two-thirds of minimum wage workers (63.1%) are female, compared with just under half of all workers (49.0%). Minimum wage workers are less likely to be married (36.1%) compared with all workers (63.6%). However, of the minimum wage workers that are married, nearly three quarters are female, compared with just under half of all married workers. The share of all workers that relate to the Pakeha ethnic group (76.6%) is slightly higher compared with the share of minimum wage workers (65.2%). There is weak evidence to suggest that there is a slightly higher incidence of Maori and Pacific Islanders among the minimum wage group, however, these differences are not statistically significant from zero at the 5% level. Study rates are much higher among minimum wage workers, with 33.7% of workers studying towards a qualification, compared with 14.9% of all workers.

Figure 1 Demographic and job characteristics, pooled 2002-2005



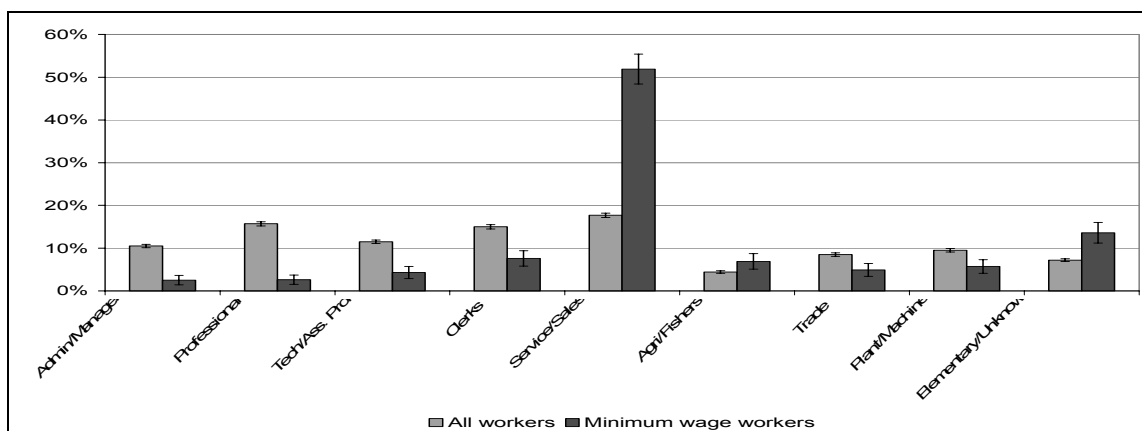
Source: Statistics New Zealand, HLFS-IS

Notes: * The study question has been pooled across the 2004 and 2005 HLFS-IS surveys because the question was introduced for respondents in the labour force in 2004. Whisker plots are 95% confidence intervals.

Not surprisingly, there is a clear difference in the education levels of minimum wage workers, compared with all workers. Among all workers 16.6% have a degree level qualification, compared with 5.1% of minimum wage workers. There is a higher incidence of part-time (less than 30 hours a week) work among minimum wage workers with 60.0% of minimum wage workers employed part-time, whereas among all workers nearly three-quarters are employed in full-time jobs (74.5%).

Figure 2 presents the share of all workers and minimum wage workers across different occupation groups. Over half (51.9%) of minimum wage workers are employed in a Services and Sales related occupation, compared with 17.7% of all workers. Minimum wage workers are also over-represented in the Agriculture and Fishers (6.9%) and the Elementary and Unknown (13.6%) occupation groups, compared with all workers (4.4% and 7.2% respectively). Unsurprisingly, minimum wage workers are under-represented within relatively high skilled occupations, in particular, Administration and Management and Professional related occupations.

Figure 2 Occupation group shares, pooled 2002-2005



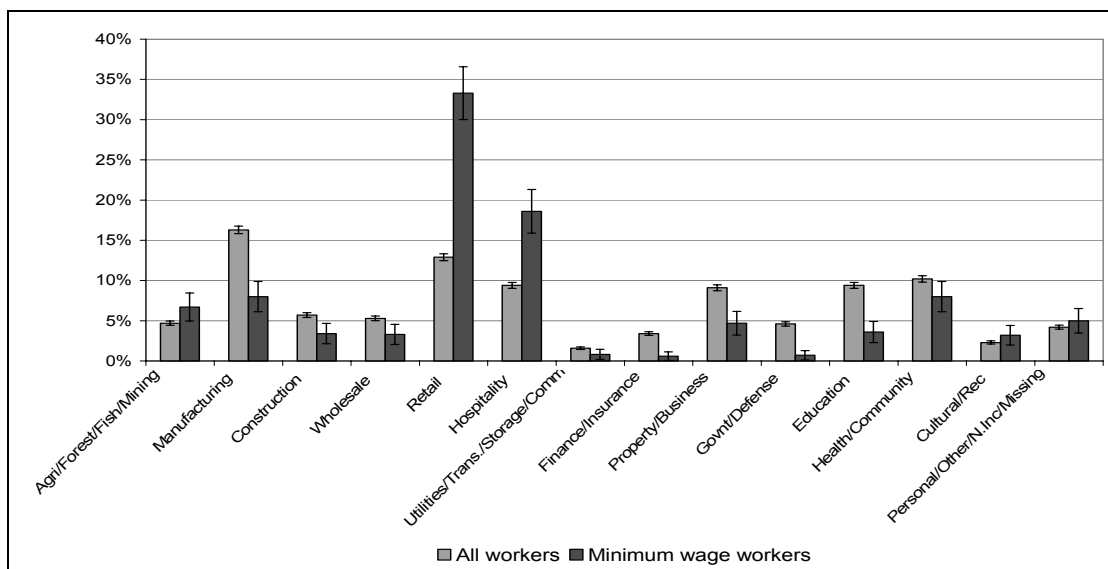
Source: Statistics New Zealand, HLFS-IS

Notes: Individuals have been classified using the 1 digit NZSCO99 occupation classification system. Whisker plots are 95% confidence intervals.

Figure 3 presents the share of all workers and minimum wage workers across different industries. The Retail and Hospitality industries contain over half of all minimum wage workers (33.3% and 18.6% respectively), compared with 22.3% of all wage and salary workers. Minimum wage workers have a slightly higher concentration in the Agriculture, Forestry, Fishery and Mining industry (6.7%), compared with all workers (4.7%).

Table 2 compares the demographic and job characteristics of all workers with minimum wage workers, separately for workers aged 16-24 years and those aged 25-64 years. For both groups of workers, aged 16-24 years and 25-64 years, just under half are female. However, among the older group of minimum wage workers nearly three quarters (72.6%) are female, compared with just over half (54.9%) of minimum wage workers aged 16-24 years. For both minimum wage age groups the share of workers that identify with the Pakeha ethnic group is lower, compared with all workers. For the Pacific ethnic group there is a distinct difference in the shares among minimum wage and all workers for the older age group. The share of older workers that are in the Pacific ethnic group is 5.1%, but among older minimum wage workers the share of Pacific workers is almost double at 10.4%. There is almost no significant difference in the shares of Maori and Pacific between the young all workers and minimum wage group.

Figure 3 Industry sector shares, pooled 2002-2005



Source: Statistics New Zealand, HLFS-IS

Notes: Individuals have been classified using the 1 digit ANZSIC96 industry classification system. The Personal/Other/N.Inc/Missing industry group contains individuals employed in the following 1 digit industries: Personal Services, Other services, Not included and Missing. Some 1 digit industries have been combined to protect confidentiality. Whisker plots are 95% confidence intervals.

Table 2 Demographic and job characteristics of minimum wage workers, pooled 2002-2005

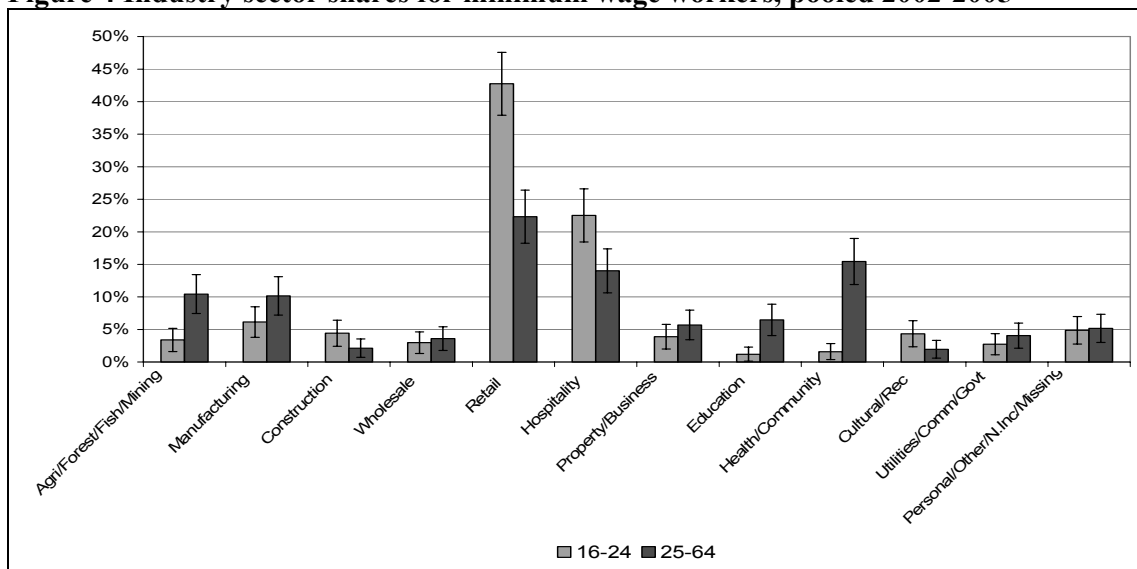
	16-24		25-64	
	<i>All workers</i>	<i>MW</i>	<i>All workers</i>	<i>MW</i>
Female	47.1%	54.9%*	49.5%	72.6%*
Pakeha	73.3%	67.8%	77.3%	62.0%*
Maori	12.0%	12.3%	9.9%	11.8%
Pacific	5.9%	5.5%	5.1%	10.4%*
Studying ¹	39.9%	58.7%*	9.1%	8.8%
Part-time	39.2%	64.9%*	22.3%	54.4%*
PT & female	23.4%	38.8%*	18.8%	46.6%*
MJH	3.3%	2.3%	2.5%	5.7%*
Hourly wage	12.7	8.9*	20.1	9.5*

Source: Statistics New Zealand, HLFS-IS

Notes: 1. The study question has been pooled across the 2004 and 2005 HLFS-IS surveys because the question was introduced for respondents in the labour force in 2004. * indicates that the difference between the minimum wage population percentage and the all workers population percentage is significantly greater than zero at the 95% level.

Nearly 60% of young minimum wage workers combine work with studying for a formal qualification, which is higher than the respective share among all young workers (39.9%). There is almost no difference between the study rates of older minimum wage workers, compared with all workers aged 25-64 years. Part-time work is more prevalent among younger workers, with around two thirds (64.9%) of young minimum wage workers in a part-time job. Although older workers are more likely to be in full-time employment, nearly 90% of part-time minimum wage jobs are held by females. Older minimum wage workers are more likely to have more than one job (5.7%), compared with younger minimum wage workers (2.3%) and older minimum wage workers report a slightly higher hourly wage.

Figure 4 Industry sector shares for minimum wage workers, pooled 2002-2005



Source: Statistics New Zealand, HLFS-IS

Notes: Whisker plots are 95% confidence intervals. Individuals have been classified using the 1 digit ANZSIC96

classification system. The Utilities/Comm//Govt industry group contains individuals employed in the following 1 digit industries: Utilities, Transport, Storage and Communications, Finance and Insurance, and Government and Defence. The Personal/Other/N.Inc/Missing industry group contains individuals employed in the following 1 digit industries: Personal Services, Other services, Not included and Missing. Some 1 digit industries have been combined to protect confidentiality.

Figure 4 presents the industry sector shares for minimum wage workers over the period 2002-2005, separately for 16-25 year olds (light grey bar) and 25-64 year olds (dark grey bar). Younger minimum wage workers are concentrated in the Retail and Hospitality industries, which account for around two thirds (65.2%) of minimum wage workers aged 16-25 years. Older minimum wage workers, aged 25-64 years, are concentrated in a larger range of industries, compared with younger minimum wage workers. Older minimum wage workers are less concentrated in the Retail and Hospitality industry sectors (36.3%) and are more concentrated in the Agriculture, Education and Health and Community services industries, compared with younger minimum wage workers.

Changes in the Characteristics of Minimum Wage Workers

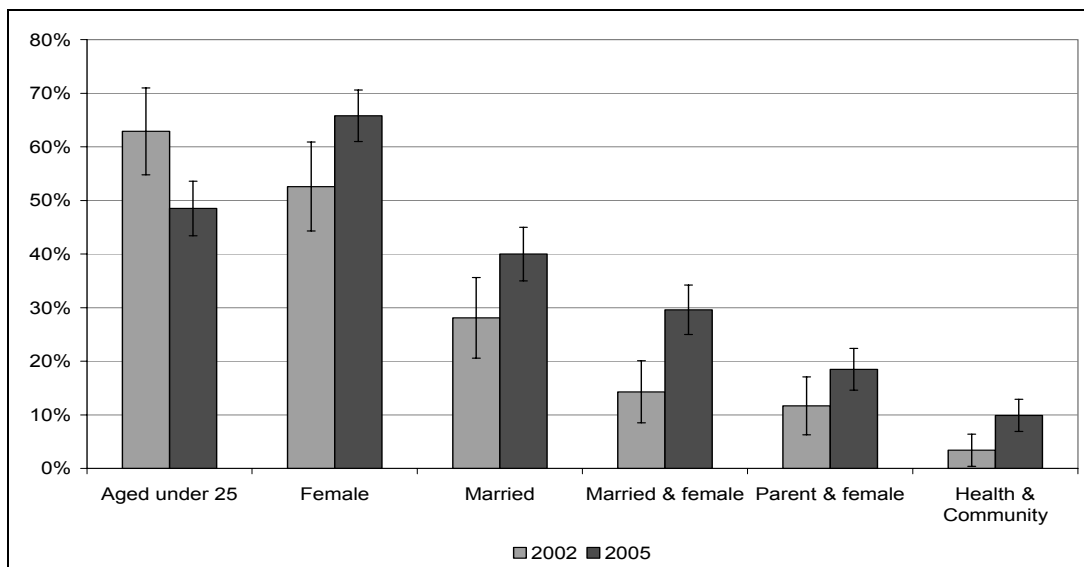
Since 2002 the New Zealand minimum wage has experienced a period of sustained growth. Between April 2002 and April 2006 the adult minimum wage increased from \$8.00 per hour to \$10.25 per hour. The minimum wage has also outpaced average wages. Over the same period the share of wage and salary workers affected by changes in the minimum wage has also increased from 2.3% in 2002 to 6.1% in 2005 (Table 1).

Figure 5 compares the population group shares for minimum wage workers between 2002 and 2005. For each population group, listed on the horizontal axis, the first (light grey) bar plots the 2002 population group percentages and the second (dark grey) bar plots the corresponding percentages in 2005. The largest and statistically significant changes are related to age, marital status and gender. The average age of a minimum wage worker increased by 18.6%, from 26 to 31 years. The incidence of females among minimum wage workers increased by 25.1% from around half (52.6%) to nearly two-thirds (65.8%). The share of minimum wage workers that are married increased by 42.4% from 28.1% to 40.0%, however the share of minimum wage workers that are married and female doubled from 14.3% to 29.6%. There was a large increase (57.2%) in the share of minimum wage workers that were also mothers (parent and female), however this increase is not statistically significant from zero.

The increase in the average age of minimum wage workers, between 2002 and 2005, appears to have been driven by a decline in the share of young workers aged 16-24 years, from 62.9% to 48.5%, and a corresponding increase in the share of workers aged 25-64 years. In comparison there was almost no change in the age structure for all workers. The percentage change in the occupation and industry mix of minimum wage workers and all wage and salary workers is less clear. The only statistically significant difference, among occupations, for minimum wage workers was a 50% decline in the share of minimum wage workers in Agricultural and Fishery related occupations. There was also a decrease in the share of all workers in Agricultural and Fishery related occupations of 17%. Although the share of young workers among minimum wage workers declined between 2002 and 2005, there was little change in the share of minimum wage workers employed in the Retail and Hospitality sectors. The largest percentage change was in the share of workers in the Health and Community sector, which increased by nearly 200% from 3.4% to 9.9%. There is some evidence to suggest that the share of minimum wage workers employed in the

Agricultural and Manufacturing industry also declined, however, these changes are not statistically significant.

Figure 5 Changes in demographic and job characteristics of minimum wage workers between 2002 and 2005



Source: Statistics New Zealand, HLFS-IS

Notes: Whisker plots are 95% confidence intervals.

Summary

The purpose of this study was to better understand the types of workers affected by minimum wage changes in New Zealand by describing their demographic and job characteristics. In particular, following a relatively large increase in the minimum wage over the period 2002-2005, the aim was to investigate whether the characteristics of minimum wage workers have changed.

A typical minimum wage worker over the period 2002-2005 is relatively young (over half are aged 16-24 years), female, working part-time and employed in a Services and Sales related occupation and in the Retail and Hospitality industries. There were distinct differences between minimum wage workers aged 16-24 years and 25-64 years. Younger minimum wage workers were less likely to be female, more likely to be engaged in studying for a formal qualification, working part-time and employed in the Retail and Hospitality industries. Whereas, older minimum wage workers are more likely to be female, of Pacific ethnicity and working full-time. Compared with younger minimum wage workers, older minimum wage workers are spread across a wider range of industries, in particular they are more concentrated in the Health and Community industry sector.

Between 2002 and 2005 there was a three-fold increase in the share of wage and salary workers identified as minimum wage workers. The small sample sizes made it difficult to identify statistically significant changes in the demographic and job characteristics of minimum wage

workers between 2002 and 2005. What is clear is that minimum wage workers in 2005 were slightly older and more likely to be female, compared with 2002. In particular, the share of married females among minimum wage workers doubled. There was a decline in the share of minimum wage workers in an Agriculture and Fishery related occupation and an increase in the share of minimum wage workers in the Health and Community services industry. Although the number of workers affected by minimum wage changes between 2002 and 2005 has increased the observed changes in the characteristics of minimum wage workers, over this period, appear to support a disproportional increase in the share of older minimum wage workers, aged 25 years and over.

There is, however, a need for further research and in particular a need to understand why the characteristics of minimum wage workers are changing. One hypothesis is that the composition of minimum wage workers has changed. On the other hand it is possible that the relatively large recent increases in the minimum wage are affecting a new set of workers (paid just above previous minimum wage changes) that have not been directly impacted by minimum wage changes in the past. This second hypothesis may occur because the minimum wage change between 2005 and 2006 was larger (7.9%), compared with the increase in the minimum between 2002 and 2003 (6.3%). Alternatively, the minimum wage increases between the years 2002-2005 may have had a compressing effect on the wage distribution resulting in a new set of workers (with different characteristics) further up the wage distribution being affected by minimum wage changes.

Acknowledgements

The author wishes to thank Dean Hyslop, Sarah Crichton, Sylvia Dixon and participants at the November 2006 meeting of the Department of Labour Research and Evaluation Group for their comments. Access to the data used in this study was provided by Statistics New Zealand under conditions designed to give effect to the security and confidentiality provisions of the Statistics Act 1975. The views expressed in this paper do not necessarily represent those of the Department of Labour and any remaining errors are my responsibility.

Notes

1. Department of Labour, PO Box 3705, Wellington, New Zealand. jason.timmins@dol.govt.nz.
2. The ratio of the minimum wage to the average wage (measured using the New Zealand Quarterly Employment Survey) was 42.7% in 2002 and 47.2% in 2005.
3. For example, see the Card versus Neumark debate in the US.
4. For a detailed description of New Zealand's minimum wage legislation and the recent reforms of the youth minimum wage see Hyslop and Stillman (2004).
5. For a detailed description of below minimum wage workers in New Zealand see Timmins (2006).
6. Over the period 2002-2005 around one third (39.0%) of minimum wage workers had a derived hourly wage. The demographic and job characteristics of minimum wage workers that report an hourly wage, compared with those with a derived hourly wage, are very similar. See Timmins (2006) for a detailed description of the characteristics of workers that report an hourly wage in the HLFS-IS, compared with those with a derived hourly wage.

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UNIONS AND UNION MEMBERSHIP IN NEW ZEALAND: ANNUAL REVIEW FOR 2005

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LAFFERTY¹

Introduction

This paper reports the results of Victoria University's Industrial Relations Centre's annual survey of trade union membership in New Zealand for 2005. The survey has been conducted since 1991, when the *Employment Contracts Act 1991* (ECA) ended the practice of union registration and the collection of official data. There has been a return to the collection of official data, available from the Department of Labour (DOL) for 2002 onwards. This year we report changes in union membership, composition, and density from December 2004 to December 2005, taking an historical perspective to compare the industrial relations periods framed by the ECA and the *Employment Relations Act 2000* (ERA).

Key findings

For the year to December 2005, union membership increased by 6.6 percent (a net increase of 23,290 members). This builds on five years of growth with an overall 25 percent increase since 1999. Strong recruitment coupled with reduced labour force growth (2.6% for wage and salary earners) over the year, has produced a 0.8 percent increase in union density. At 21.9 percent, union density is now at its highest level since 1998. Most of the union membership growth was achieved by CTU-affiliated unions in the areas of health and community services, education, manufacturing, and transport, storage and communications. Retail, wholesale, restaurants, and hotels again recorded the largest drop in members (-1,046).

Methodology

Our survey included those unions registered as at 31 December, 2005, as per the Department of Labour website of registered unions (see www.ers.dol.govt.nz/union/registration.html and DOL Annual Report 2005). In late January 2006, each of the registered unions was sent a survey requesting membership numbers as at 31 December 2005. Ninety six unions responded. For those that did not, details were obtained either through telephone contact, or based on the DOL Annual Report 2005. In the time between last year's survey and the return of this year's survey, five unions deregistered and nine new unions registered, bringing the total number of unions to 175 (see Appendix for explanation of union registration under ERA).

¹ Leda Blackwood, Goldie Feinberg-Danieli and George Lafferty are Senior Research Fellow; Research Fellow; and Director respectively, at the Industrial Relations Centre, Victoria University of Wellington. This study is part of a larger project which receives funding from the Foundation for Research, Science and Technology (Contract no. Vic X0301). The authors are grateful to all the union officials who contributed to this research; and to Priya Maheshwari, Adam Malanchak, James Upton, and Jennifer Halli for their assistance with data entry and publication.

Trade Union Membership and Density

Table 1 shows trade union membership and density since 1991. Union density is defined as the proportion of potential union members who belong to a union.² One commonly used measure of union density is based on the total employed labour force. We present this figure here, but note that it includes people who are not usually potential union members (for example, employers, self-employed and unpaid family members). A more accurate measure of union density is also presented – this figure is based on wage and salary earners only.

Table 1: Trade Unions, Membership and Union Density 1991-2005

Year	Union membership	Number of unions	Potential union membership		Union density	
			Total employed labour force	Wage and salary earners	(1) / (3) %	(1) / (4) %
	(1)	(2)	(3)	(4)	(5)	(6)
Dec 1991	514325	66	1518800	1196100	33.9	43.0
Dec 1992	428160	58	1539500	1203900	27.8	35.6
Dec 1993	409112	67	1586600	1241300	25.8	33.0
Dec 1994	375906	82	1664900	1314100	22.6	28.6
Dec 1995	362200	82	1730700	1357500	20.9	26.7
Dec 1996	338967	83	1768200	1409300	19.2	24.1
Dec 1997	327800	80	1773200	1424000	18.5	23.0
Dec 1998	306687	83	1760900	1399100	17.4	21.9
Dec 1999	302405	82	1810300	1435900	16.7	21.1
Dec 2000	318519	134	1848100	1477300	17.2	21.6
Dec 2001	329919	165	1891900	1524900	17.4	21.6
Dec 2002	334783	174	1935600	1566400	17.3	21.4
Dec 2003	341631	181	1986100	1598700	17.2	21.4
Dec 2004	354058	170	2073800	1676200	17.1	21.1
Dec 2005	377348	175	2105600	1719500	17.9	21.9

Source: Statistics New Zealand, Household Labour Force Survey, Table 3, Table 4.3, Unpublished, 2005.
Industrial Relations Centre Survey

Note: Figures in columns 3, 4, 5 & 6 are different to those reported in years prior to 2004, due to a population rebase by Statistics NZ in June 2004, see HLFS population rebase: June 2004 quarter, July 2004)

In 2005, total union membership increased by 6.6 percent (23,290 members). This is the largest increase in a single year that we have reported. Since the nadir of 302,405 in 1999, there has been an overall 25 percent increase in union membership.

Growth in union membership considerably outstripped growth in the labour force generally (1.5%) and in the wage and salary earners component (2.6%). As a consequence, there was an increase in union density of 0.8 and 0.8 percent respectively. This takes union density to the highest it has been since 1998.

² The measure of potential union members used to calculate union density varies from country to country and there is no agreed 'correct' method. Consistency in reporting so that results can be compared year on year is, though, a priority.

Figure 1: Distribution of wage and salary earners across industry sectors.

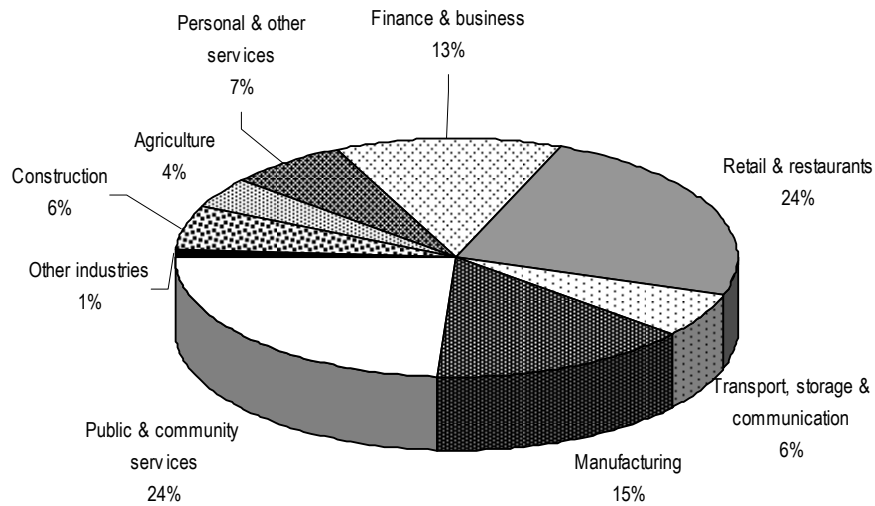
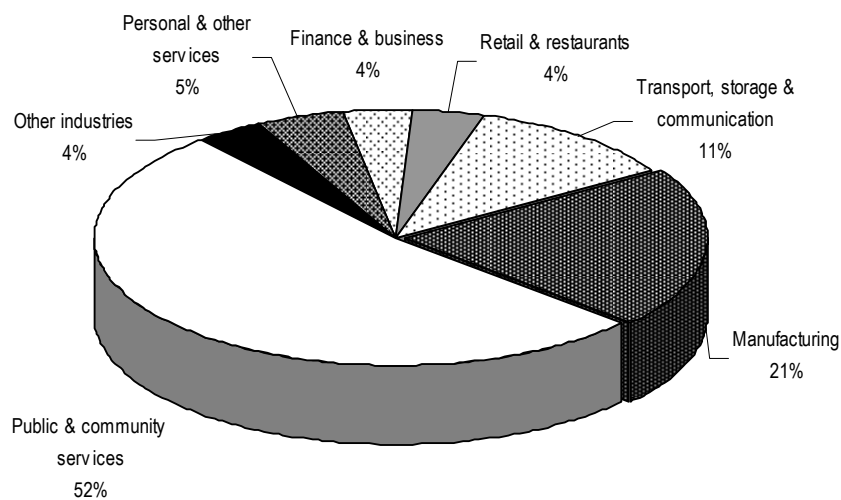


Figure 2: Distribution of union members across industry sectors.



Union membership and employment by industry

In this section we look at the distribution of wage and salary earners (see Figure 1) and of union members (see Figure 2), across industries (classified according to the Australia New Zealand Standard Industry Classification). This provides a more nuanced picture of patterns of union representation in the New Zealand context.

In December 2005, the largest concentrations of New Zealand wage and salary earners were in public and community services (24%); retail, wholesale, restaurants, and hotels (24%); manufacturing (15%); and finance, insurance and business services sectors (13%: see Figure 1). Union membership was overwhelming concentrated in public and community services (52%), followed by manufacturing (21%) and transport, storage and communication sectors (11%: see Figure 2). These industries are not major growth areas of the labour force (Statistics New Zealand, unpublished tables). In contrast, the large retail, wholesale, restaurants, and hotels industry which employs 24 percent of all wage and salary earners and is a growth area had only four percent of total union membership.

Change in union membership and employment by industry

Table 2 examines gains and losses in membership by industry and Table 3 compares these with changes in wage and salary earner employment.

Table 2: Union membership change by industry 2004 – 2005

Industry group	Dec-04	Dec-05	Change 2004-2005		New members breakdown
			Number	(%)	(%)
Agriculture, fishing, forestry etc	3417	3382	-35	-1	0
Mining and related services	1668	1543	-125	-7	-1
Manufacturing	71504	78187	*6683	9	29
Energy and utility services	4628	3644	-984	-21	-4
Construction & building services	5729	5208	-521	-9	-2
Retail, wholesale, restaurants, hotels	15861	14815	-1046	-7	-4
Transport, storage and communication	38692	42379	3687	10	16
Finance, Insurance and business services	13402	13355	-47	0	0
Personal and other services	19974	17904	** -2070	-10	-9
Public and community services	179183	196931	17748	10	76
<i>Govt admin and defence</i>	35048	33266	-1782	-5	-8
<i>Education</i>	76909	78577	1668	2	7
<i>Health and community services</i>	67225	85088	17863	27	77
TOTAL	354058	377348	23290	6.6	100
Membership private sector	163927	175415	11488	7	49
Membership public sector	190131	201933	11802	6.2	51

Source: Industrial Relations Centre Survey, 2005

* A proportion of this increase is due to under-reporting of membership in previous years.

** Most of this loss is due to a reclassification of some employees into community services.

Membership gains in 2005 were restricted to four industries where high profile union campaigns had been a feature of the year. The largest gains were in public and community services, particularly health and to a lesser extent, education. Manufacturing and transport, storage and communications accounted for the overall membership growth in the private sector. As the industry with the largest

proportion of private sector union members, the growth in manufacturing is promising. Particularly in light of the decline in this industry's workforce due to the loss of jobs overseas and high attrition rates through retirement.

In the large retail, wholesale, restaurants, and hotel industries, overall losses in union membership continue—although they are considerably less than last year's 11 percent drop. This is an important, yet difficult industry in which to recruit (and retain) members due to high levels of part-time and casual work, and high turnover – particularly in times of strong economic growth.

Despite an overall slowing, there were a number of industries where labour force growth was considerable: personal and other services; construction and building services; finance, insurance and business services, and mining and related services. Of note, across these industries, union membership either remained steady or declined with a concomitant reduction in density.

Table 3: Union membership change and labour force change 2004 - 2005

Industry group	Union membership Dec 2005	Change in membership 2004-2005 %	Labour force Dec 2005 (000)	Change in labour force 2004-2005 %
Agriculture, fishing, forestry etc	3382	-1	76.4	1
Mining and related services	1543	-7	6.3	5
Manufacturing	78187	9	250.0	-4
Energy and utility services	3644	-21	7.9	-11
Construction & building services	5208	-9	110.2	11
Retail, wholesale, restaurants, hotels	14815	-7	405.2	3
Transport, storage and communication	42379	10	103.7	-2
Finance, Insurance and business services	13355	0	228.1	8
Personal and other services	17904	-10	116.3	11
Public and community services	196931	10	407.9	-1
• Govt admin and defence	33266	-5	82.0	5
• Education	78577	2	155.1	-2
• Health and community	85088	27	170.8	-2
TOTAL	377348	6.6	1719.5	2.6

Source: Industrial Relations Centre Survey, 2005; Statistics New Zealand, Household Labour Force Survey – Wage & salary earners component. Unpublished, 2005.

Public / private divide

In addition to industry breakdown, our survey asks unions to estimate how many of their members work in the private sector and the public sector. 2005 saw more balanced growth between the private and public sectors than in previous years. The private sector accounted for 49 percent of membership growth compared with only 30 percent in 2004. Still, 53.5 percent of all union members are employed in the public sector; only slightly down from the previous year's figure of 53.7 percent.

The concentration of union membership in the public sector, which accounts for less than half of all wage and salary earners in New Zealand, is reflected in a public/private divide in union density

figures. We have used the Quarterly Employment Survey (QES) to estimate total employment by public and private sector. Table 4 shows that the public/private divide in New Zealand is somewhat greater than in our main international comparators.

Table 4: Union Density – public and private sectors in selected countries (2005)

Country	Union density	Public sector	Private sector
New Zealand	22	70	14
Australia	23	47	17
UK	26	59	17
USA	13	37	8

Source: Statistics New Zealand, QES March 2005; Australian Bureau of Statistics 2005; UK Dept of Trade and Industry 2005; US Dept of Labor 2005; Industrial Relations Survey, 2005

Changes in union density

Table 5 shows the density figures by industry for 2004 and 2005. Density has been calculated by using the wage and salary earners only component of the Household Labour Force survey, thus eliminating the self-employed and employers from the calculations. All industries within public and community services continue to be strongly unionised; there has been a significant increase in density in health and community services. Across the private sector, energy and utility services, transport, storage and communications, manufacturing, and mining are the most strongly unionised industries. Unions are struggling to maintain a presence in important areas of the labour market; particularly retail, wholesale, restaurants and hotels.

Table 5: Density by industry 2004, 2005

Industry group	Approx. density 2004 (%)	Approx. density 2005 (%)
Agriculture, fishing, forestry etc	4.5	4.4
Mining and related services	27.8	24.5
Manufacturing	27.6	31.3
Energy and utility services	52.0	46.1
Construction & building services	5.8	4.7
Retail, wholesale, restaurants, hotels	4.0	3.7
Transport, storage communication	36.7	40.9
Finance, insurance & business services	6.3	5.9
Personal and other services	19.0	15.4
Public and community services	43.6	48.3
• Govt administration & defence	44.9	40.6
• Education	48.5	50.7
• Health & community services	38.5	49.8

Source: Statistics New Zealand, Household Labour Force Survey – Wage and salary earners component, Unpublished, 2005.

Sex and ethnicity

Although women comprise only 46 percent of the New Zealand labour force (Household Labour Force Survey, Dec 2005 Table 3, Statistics New Zealand 2005), they constitute 54 percent of union membership. This strong participation rate reflects women's high representation in public and community services.

This year only 21 unions advised that they collected statistics on ethnicity. These unions covered 222,609 employees or 59 percent of total union members. Consistent with previous years, Table 6

shows a slightly higher representation of Maori and Pacific Islander peoples than their representation in the labour force would lead us to expect, and the converse for Pakeha. Inspection of survey returns suggests that some unions may be placing employees for whom they do not have ethnicity information in the 'Other' category. Accordingly, the survey sample percentages reported in this table need to be interpreted with caution.

Table 6: Ethnicity by sample and labour force 2005 – where details are provided

Ethnic group	Survey sample (%)	Total labour force*
NZ European / Pakeha:	58.2	76
Maori:	11.5	10
Pacific Peoples:	7.6	5
Asian:	2.7	N/A
Other:	20.0	10
Total	100	100

* Statistics New Zealand, Household Labour Force Survey, December Quarter 2005, table 5. No breakdown given for Asian working population

Trade Union Numbers, Distribution of Membership by Size, and Affiliation

Table 7 shows the number of identifiable trade unions, categorised by size, at the commencement and conclusion of the ECA period (1991 and 1999 respectively), and five years into the ERA period (2005). Refer to Table 1 for the number of trade unions for all years from 1991 onwards.

Table 7: Membership by union size 1991 – 2005, selected years

M'ship range	May 1991			Dec 1999			Dec 2005		
	No.	Members	%	No.	Members	%	No.	Members	%
Under 1000	4	2954	1	48	12703	4	140	19436	5
1000 – 4999	48	99096	16	22	43709	14	23	56801	15
5000 – 9999	8	64268	11	3	19669	7	4	30050	8
10000+	20	436800	72	9	226324	75	8	271061	72
Totals	80	603118	100	82	302405	100	175	377348	100
Av. Size		7539			3688			2156	

Source: Industrial Relations Centre Survey

The clearest effects of regulatory regimes on the industrial relations landscape in New Zealand are in relation to the number of trade unions. Union amalgamations followed the *Labour Relations Act 1987* requirement that unions have a minimum membership of 1000. This produced a dramatic drop in trade union numbers from 259 in 1985 to 104 in 1990. The abolition of registration provisions under the ECA (1991) made identification of unions difficult, but estimates suggest there was a further decline in numbers during this period. Reversing this decline, the ERA's (2000) requirement that only registered unions can participate in collective bargaining, and its setting of a low membership threshold for registration at 15 members, has seen the number of registered unions more than double (see Table 1).

Although the ERA has seen growth in the number of unions, most new unions are small, enterprise or workplace based, and do not see themselves as unions in the traditional sense. Many exist solely for the purposes of negotiating a collective agreement and they tend to have extremely limited resources. Moreover, their entry has done little to change the distribution of union membership. Small unions (those with fewer than 1000 members) still only account for five percent of overall membership, and large unions (those with more than 10,000 members) account for 72 percent of all membership. It is these large, well established, and better resourced unions that account for most of the membership growth.

Peak body affiliations

Of the 175 registered unions in our survey, only 37 are CTU affiliates (see Table 8). However, with 333,395 members, CTU affiliates have 88 percent of total union membership and represent 18 of the 20 largest unions in New Zealand. This proportion has been consistent throughout the period of the ERA. Moreover, in the year to December 2005, CTU affiliated unions accounted for 99 percent of the increase in union membership with a net gain of 22,944 members.

Table 8: NZCTU affiliation 1991 – 2005

Year	NZCTU Affiliate unions	Members	Percentage of total m'ship in CTU affiliates
1991	43	445116	86.5
1992	33	339261	79.2
1993	33	321119	78.5
1994	27	296959	78.9
1995	25	284383	78.5
1996	22	278463	82.2
1997	20	253578	77.4
1998	19	238262	77.7
1999	19	235744	78.0
2000	26	273570	85.9
2001	32	289732	87.8
2002	34	293466	87.7
2003	36	297440	87.1
2004	38	310451	87.7
2005	37	333,395	88.4

Source: Industrial Relations Centre Survey

Discussion

In 2005 we saw the largest increase in union membership in a single year since the Industrial Relations Centre commenced reporting these figures in 1991. Moreover, for the first time in five years, an increase in union density is also reported taking density figures to the highest they have been since 1998. In part, this success can be attributed to the predicted slowing in labour market growth. Previous years have seen unions struggle to recruit and retain members in an environment of high labour turnover and where large numbers of new jobs created have been casual and short-term. What marked 2005 most, however, were the highly visible union campaigns—particularly in the health and community, and the manufacturing industries. The success of campaigns such as the EPMU's call for '5 in 05' and 'Fix Our Planes at Home'; and the NZNO and PSA campaigns amongst health and community service workers, is measured not only in record increases in wages for the year, but in the greater confidence in the union movement more generally.

The election of a Labour-led government in September 2005 provides the union movement with a small window of opportunity in which it can consolidate its gains and seek improvements to the legislative and institutional frameworks governing the employment relationship. MMP in New Zealand makes the radical anti-union reforms that are currently underway in Australia an unlikely prospect for a future National-led government. Nevertheless, complacency on the part of the New Zealand union movement is clearly not an option. In particular, the problem of free-riding, where non-union members benefit from union-negotiated pay and conditions, remains. So too, difficulties in gaining employer buy-in to Multi-Employer Collective Agreements which can provide for industry-wide standards. And the piecemeal and often short-term nature of bargaining that limits what can be negotiated is an impediment to addressing emerging areas of concern for workers.

An important achievement for the union movement in 2005 was the more balanced growth between the public and private sectors. However, for the private sector, this growth was mainly in manufacturing; an industry that continues to decline as jobs move off-shore and its ageing workforce approaches retirement. A challenge for the union movement remains in developing innovative strategies for recruiting in traditionally non-unionised industries within the private sector. Industries such as retail, hotels, and restaurants are particularly important, not only for the size of their workforce but their position as an entry-point into work for many young New Zealanders. Such industries are notoriously difficult areas for unions to organise due to the casualised nature of much of the work and the size of many establishments. On an optimistic note, although a loss in overall union membership was reported for retail, hotels, and restaurants, these figures mask the success of UNITE and the SFWU in targeting mostly young workers in the fast food and casino industries. Current campaigns such as the NDU's 'Shelf Respect' and the SFWU's 'Clean Start' campaigns show a continued willingness on the part of unions to tackle areas of work that are difficult to organise and where often the lowest paid are employed.

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Appendix

The Employment Relations Act and Trade Union Registration

The objects of the Act with respect to the recognition and operation of unions are:

- To recognise the role of unions in promoting their members' collective interests
- To provide for the registration of unions that are accountable to their members
- To confer on registered unions the right to represent their members in collective bargaining
- To provide representatives of registered unions with reasonable access to workplaces for purposes related to employment and union business.

In pursuit of these objectives, the ERA establishes a union registration system, and grants registered unions bargaining rights together with rights of access to workplaces (specified in sections 19-25). To gain registration, a union must have more than 15 members, and provide a statutory declaration that it complies with the requirements of s14 of the Act regarding rules, incorporation and independence from employers. The Act requires the statutory declaration to stipulate that the union is 'independent of, and is constituted and operates at arm's length from any employer' (s14(1)d). The Registrar of Unions may rely on the statutory declaration to establish entitlement to registration. Only registered unions may negotiate collective agreements, and collective agreements apply only to union members whose work falls within the agreement's coverage clause, and to new workers whose work falls within the agreement's coverage clause for the first 30 days of their employment.

UNCOVERING THE ORIGINS OF NEW ZEALAND'S *EMPLOYMENT RELATIONS ACT 2000*: A RESEARCH FRAMEWORK

JAMIE LATORNELLE¹

Abstract

It has been argued that the Employment Relations Act (ERA) builds on experiences under the ECA as well as embracing the values of the country's earlier conciliation-arbitration system. A review of New Zealand's history of employment relations legislation reveals that the relational approach of the ERA does indeed maintain a variety of principles embedded within New Zealand employment relations by the ECA. Additionally, the ERA also attempts to re-establish earlier principles rejected by the ECA. However, beyond re-establishing older principles and continuing more recent ones, the ERA also introduces four new concepts into the employment relations system in New Zealand. This paper provides a proposed research framework to fully understand the origins of these key principles underlying the ERA as well as to understand why these concepts were incorporated into the ERA. The paper concludes with a preliminary document analysis of Labour Party policy documents and speeches by key Labour Party members.

Introduction

On 2 October 2000, the New Zealand legislature passed into law the *Employment Relations Act* (the ERA), one of the first major pieces of legislation passed by the Labour Party led coalition government elected the previous year. During the election, a major aspect of the Labour's manifesto was the replacement of the *Employment Contracts Act 1991* (the ECA). Prior to the election, the Labour Party's spokesperson on labour relations signalled that the replacement of the ECA was intended to provide New Zealand with employment legislation which would be long-lived. "Our hope is to provide legislation that is sufficiently well balanced, fair and devoid of ideology that it will attract wide enough support to stand the test of time" (Hodgson 1999: 175). More recently, Margaret Wilson, the Minister of Labour at the time of the ERA's passage into law made the following observation.

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The Employment Relations Act 2000 marked a break with the employment relations regulatory framework of the 1990s enacted in the Employment Contracts Act 1991. It also signalled the advent of a new approach to the employment relationship that built on the experiences of the 1990s as well as the values of the system of conciliation and arbitration. The contractual adversarial stance to employment relations was replaced by a negotiated cooperative approach that was founded on the equitable notion of good faith (Wilson 2004: 9).

The objectives of the ERA are in stark contrast to those of its predecessor, the ECA. The ERA seeks to “build productive employment relationships through the promotion of good faith in all aspects of the employment environment and the employment relationship” (Employment Relations Act 2000: s.3). The ECA, on the other hand, sought to “promote an efficient labour market” (Employment Contracts Act 1991: long title). Even so, the structure of the ERA is more consistent with the ECA than with pre-ECA legislation. In this sense, the ERA does build on the experiences of the 1990s under the ECA. However, in its desire to promote collective bargaining, the ERA shares a commonality with earlier legislative approaches in New Zealand. Nevertheless, a number of the principles underlying the ERA are new to employment relations in New Zealand, namely:

1. encouragement of building productive employment relationships;
2. promotion of good faith behaviours;
3. extension of the duty of good faith to all aspects of the employment relationship and employment environment; and
4. recognition of implied mutual obligations of trust and confidence within employment relationships.

It is unclear where these new concepts originated, why they were incorporated into the legislation, or even if they do indeed represent a link to the values of the conciliation-arbitration system or the experiences of the 1990s as argued by Wilson (2004). Nevertheless, the introduction of these new principles within the ERA makes possible the argument that the relational approach is a radical innovation in employment relations legislation rather than an evolutionary change. It is not the intent of this paper to debate the extent to which these concepts are revolutionary or evolutionary change, but rather to provide a preliminary review of documentary evidence regarding the origins of these concepts as well as to discuss a framework for further research to investigate and more clearly establish their origins.

This paper is structured as follows: first, a brief discussion of the four legislative approaches to the regulation of employment relations in New Zealand which have been used between 1894 and the present-day. This leads to an explanation of the significance of the relational approach, the most recent of the four legislative approaches. This explanation considers the key principles underlying the approach relative to the key principles established by earlier legislation thereby allowing an identification of the continuities and discontinuities of key principles between and among the approaches. The paper then turns to the research questions and research framework resulting from the primary issues raised by the earlier sections of the paper. The paper concludes

with a discussion of the results of the preliminary document analysis to identify the possible origins of the new concepts introduced by the ERA.

Approaches to employment relations legislation

New Zealand's history of employment relations legislation extends back to the late 19th century. During this time, the legislative regulation of employment relations has been characterised by four major approaches: the conciliation-arbitration approach; the 'modified' conciliation-arbitration approach; the contractual approach; and, most recently, the relational approach.

The conciliation-arbitration approach was first established in 1894 through the enactment of the Industrial Conciliation and Arbitration Act (the ICAA). The structures and features of this approach remained largely unchanged for 70 to 80 years until the emergence of the 'modified' conciliation-arbitration approach. Exactly when the conciliation-arbitration approach was replaced with a 'modified' approach is open to some interpretation. For instance, Geare (1993) suggested the modified approach began as late as 1987 with the introduction of the Labour Relations Act, while Hince (1993) argues that the modification of the conciliation-arbitration approach was a more evolutionary process beginning in the 1970s with the introduction of the Industrial Relations Act 1973 (IRA). Other authors place the emergence of a modified approach even earlier. Woods (1975) stresses that while the 1961 shift from 'compulsory unionism' to unqualified preference' may seem of little significance, in reality it was a dramatic change. At the very least, this shift foreshadowed the need to move to a modified approach. For the purposes of this paper however, the modified approach will be considered to have largely been enabled through a series of Acts during the 1970s and 80s: the Industrial Relations Act 1973 (the IRA), the Industrial Relations Amendment Act 1984 (the IRAA), and the Labour Relations Act 1987 (the LRA). In the third, contractual approach, the legislative regulation of employment relations was significantly altered by the provisions of the Employment Contracts Act 1991. In 2000, the legislative regulation of employment relations was again changed with the enactment of the Employment Relations Act 2000. The ERA heralded the arrival of the relational approach.

Significance of the relational approach

It has been argued that the relational approach embodied within the provisions of the ERA is the latest in a series of "frequent, radical changes in employment relations during the last two decades" (Rasmussen 2004: 1). The Labour government stressed that further legislative change was needed since the labour market reforms of the 1980s and 1990s had failed to facilitate labour market adjustment (Clark 2003). Furthermore, the Labour government argues that through the ERA it is attempting to create a new approach to employment relations which not only builds on the experiences of the contractual approach but also draws on the values of the conciliation-arbitration approach (Wilson 2004).

A full review of the literature pertaining to New Zealand's history of employment relations legislation in order to identify the drivers, features and outcomes of each legislative approach is beyond the scope of this paper². Instead this section will summarise the key principles underlying the relational approach as well as highlighting the continuities and discontinuities of these key principles between and among the legislative approaches prior to the relational approach.

The relational approach is attempting to re-establish two principles underpinning employment relations systems recognised by the conciliation-arbitration approach. First, the philosophy of collectivism has traditionally been a fundamental aspect of employment relations in New Zealand since the introduction of the conciliation-arbitration approach in 1894 (Hince 1993). This principle was rejected by the contractual approach as the dominant mode for the regulation of employment relationships in New Zealand. In this regard, Geare (1993) suggests that in addition to the stated objectives of the ECA, the contractual system was also intended to weaken unions and increase the power of employers. Likewise, Morrison (2003) argues that trade unions were viewed as one of the more important rigidities or inflexibilities that needed to be addressed in the New Zealand labour market. As a consequence, the contractual approach established individualism as an underlying philosophy of the employment relations system in New Zealand. In contrast, the relational approach attempts to re-establish the key principle of collectivism through the promotion of collective bargaining as an integral part of employment relations.

The relational approach also attempts to re-balance efficiency and equity concerns as the twin objectives of an employment relations system (Meltz 1989). These twin objectives were supported by the legislation of both the conciliation-arbitration approach and the modified conciliation-arbitration approach. Through the preamble of the ECA, the contractual approach explicitly focused on efficiency as the primary goal of the employment relations system. Walsh and Ryan (1993: 28) observe that the contractual approach's "neo-classical emphasis on labour market efficiency led to a fundamental repudiation of state regulation of the processes of bargaining and representation". In this regard, the ECA is a repudiation of the assumed need to balance efficiency and equity within the employment relations system (Latornell 2005). The relational approach re-balances these twin goals, as seen through the introduction of provisions for good faith behaviours.

The relational approach also continues the tradition - established by the conciliation-arbitration system - of specialist employment institutions to assist in the resolution of employment relations disputes. While the nature and structures of the specialist employment institutions have varied across the four approaches, acceptance of the need to maintain such institutions has been consistent. In fact, the need for specialist employment institutions is the single principle underpinning New Zealand employment relations which has survived unabated through all four approaches.

² There is much literature surrounding the historical development of employment relations legislation in New Zealand. In addition to the references in this paper, the author recommends the following as being of particular relevance to the matters covered by this paper: Bray & Walsh 1998; Brook, 1990; Brosnan, Smith, & Walsh 1990; Dannin 1997; Deeks & Boxall 1989; Deeks, Parker, & Ryan 1994; Deeks & Rasmussen 2002; Harbridge & Crawford 1997; Walsh 1984 & 1993.

The relational approach also maintains and continues a variety of principles established more recently during either the modified conciliation-arbitration approach or the contractual approach. The relational approach continues a single legislative structure for the regulation of both collective and individual employment relationships as established by the contractual approach. Until 1991, only collective employment relationships had been regulated through statute; individual employment relationships had been primarily regulated through the common law. The approach also maintained decentralised structures of wage fixing initiated during the modified conciliation-arbitration approach and subsequently greatly expanded by the contractual approach. The principles of voluntarism regarding union membership and freedom of association were established by the contractual approach. The relational approach maintains these principles within the employment relations system in New Zealand. Finally, encouragement of self reliance among the direct parties to an employment relationship were introduced during the modified conciliation-arbitration approach and subsequently significantly extended by the contractual approach. This principle is maintained by the relational approach, although somewhat moderated through the states provision of information and mediation services to assist in the resolution of employment relations disputes.

Beyond re-establishing older principles and continuing and maintaining more recent ones, the relational approach also introduces new principles to employment relations legislation in New Zealand. These principles are:

1. building productive employment relationships;
2. the promotion of good faith behaviours;
3. the extension of the good faith concept to “all aspects of the employment environment and of the employment relationship” (Employment Relations Act 2000: s.3(a)); and
4. recognition of the implied mutual obligations of trust and confidence between the parties to an employment relationship.

The origins of the new principles, embedded within the relational approach, are worthy of question. The patterns of continuity and discontinuity of principles between and among the four approaches to the legislative regulation of employment relations in New Zealand also raise a series of questions regarding the nature of the relational approach. These research questions will be presented in the next section.

Research questions

The foregoing brief analysis of the principles underlying the relational approach and their continuity and discontinuity with the principles originating in earlier approaches raises a series of questions worthy of further consideration.

1. Where have the new principles underlying the relational approach originated? Why have they been included in the legislation?
2. Given the inclusion of these new key principles:

- a. is the relational approach an evolution of the modified conciliation-arbitration approach (in the same way that the modified approach was an evolution on the original conciliation-arbitration approach)?
 - i. If so, does the contractual approach represent an anomaly in legislative approaches to the regulation of employment relations in New Zealand?
- b. to what extent does the relational approach represent a break from the modified conciliation-arbitration approach (and the original conciliation-arbitration approach)?
 - i. If so, is the relational approach an evolution of the contractual approach?
 - ii. If so, to what extent are the consistencies between the relational approach and the contractual approach continuities or are they contingent similarities?

Research framework

In order to uncover the origins of the new principles introduced by the relational approach and to understand the relationship between the key principles of relational approach and earlier approaches, in-depth research is necessary. In addition to a review of relevant literature to identify the drivers, key features, underlying principles and outcomes of New Zealand history of legislative approaches to the regulation of employment relations, the framework for this research will include the following aspects.

1. A document analysis to identify the origins of new principles underlying the ERA. This document analysis will include:
 - a. policy documents as well as speeches and other documents authored by key members of the New Zealand Labour Party; and,
 - b. Cabinet and Select Committee papers as well as parliamentary debates from 1999 and 2000 which address the development of the Employment Relations Act 2000.
2. In-depth, semi-structured interviews with key players involved in the development of the ERA, namely politicians and officials from the New Zealand Labour Party and its coalition partners, as well as government officials involved in drafting the ERA. Interviews will also be sought with officials from central lobby groups, such as the New Zealand Council of Trade Unions (NZCTU), the New Zealand Employers Federation (now Business New Zealand) and the New Zealand Business Roundtable (NZBR). All three of these groups sought to influence the drafting and passage of the ERA.

Origins of new principles introduced by the relational approach

It has already been noted that the relational approach introduces and establishes four new principles underpinning the legislative regulation of employment relations in New Zealand, namely: (1) building productive employment relationships; (2) promotion of good faith behaviours; (3) extension of the good faith concept to all aspects of the employment environment; and (4) recognition of the implied mutual obligations of trust and confidence. In order to identify the origins of these concepts, a preliminary analysis has been conducted of

publicly available Labour Party policy documents as well as speeches and other documents authored by key players within the Labour Party from the period 1990 through 1999. This period is of particular interest as it was during this time that the Labour Party was in opposition. Prior to 1990, Labour Party policy was clear; the Labour Party had formed the government and its policies relating to employment relations were manifest in the legislation of the modified conciliation-arbitration approach. However, the Labour Party lost the 1990 general election and was in opposition through three general elections until 1999. Such an analysis will assist in determining the nature of the shifts in Labour Party policy during their time in opposition. The following sub-sections discuss the potential origins of each of these four new principles as well as advancing questions to be investigated through the interview phase of future research.

Productive employment relationships

The objective of building productive employment relationships is fundamental to the ERA, but the phrase itself is not defined with the legislation. The preliminary documentary review fails to uncover the phrase, leading to the potential conclusion that a key philosophy underpinning the relational approach was not part of policy discussions.

So where did the concept of productive employment relationships originate? What was the intent of introducing such a phrase as a key object of the employment relations legislation? Is this an attempt to incorporate the general concept of 'fairness' into the overall objectives of the ERA? 'Fairness' is a concept which features in Labour Party policy documents as early as 1992 (see for example New Zealand Labour Party, 1992a, 1992b, 1992c) and continues through the later 1990s (Cullen 1993; Maharey 1995; Hodgson 1999). Or, is productive employment relationships merely a phrase which 'sounded good' at the time of the legislation's drafting?

Good faith behaviours

The promotion of good faith behaviours most likely arose out of two concerns. Firstly, as discussed in the previous sub-section, the Labour Party's interest in ensuring fairness within the employment relations system, and secondly, a desire on the part of the Labour Party for New Zealand to ratify International Labour Organisation (ILO) Convention 87 on Freedom of Association and Convention 98 on the Right to Organise and Bargain Collectively. These two conventions are often considered to be two of the six basic human rights (Haworth & Hughes 1995). Ratification of these conventions has been a key feature of Labour Party policy documents on employment relations since at least 1993 and was also a driver for the replacement of the contractual approach with the relational approach. Indeed the second of the two key objects of the ERA is to "promote observance in New Zealand of the principles underlying" (Employment Relations Act 2000: s. 3(b)) these two ILO Conventions. The desire to ratify these ILO Conventions was also provided as a key reason why the Labour Party could not support a return to unqualified preference (Clark 1993), instead favouring voluntarism in trade union membership.

Of particular interest to this paper is the fact that the notion of good faith is typically embedded within the concept of freedom of association. Novitz (1996: 121) notes that there are two

commonly used approaches to the concept of freedom of association which are largely in conflict with each other.

Upon one approach, freedom of association is merely a natural extension of individual liberty and the continued protection of personal choice is fundamental to its survival. The opposite view is that, within the context of industrial relations, the function of freedom of association is to redress the power imbalance typical of the relationships between employer and employee. Freedom of association therefore requires promotion of collective bargaining.

Novitz (1996: 124) further observes that more recent cases of the ILO Committee on Freedom of Association suggest a duty to bargain in good faith is an appropriate "compromise between the active promotion of collective bargaining and the preservation of freedom of choice".

Preliminary document analysis reveals the concept of good faith took time to appear within Labour Party policy. 'Good faith bargaining' first appears in a 1997 policy document (New Zealand Labour Party 1997). In a later article written during the run-up to the 1999 general election a broader notion of good faith in the employment relationship is advanced (Hodgson 1999). Even then, the concept is a vague one and its intended meaning does not appear within policy documents. While an in-depth analysis of the nature of good faith is beyond the scope of this paper, it is worthwhile noting that it has been characterised in a number of ways and has been equated with the notions of honesty, loyalty, cooperation and a duty of reasonableness (for a fuller discussion, see sources such as: Baron 2005; Burton 2001; Carter & Peden 2003; Davenport & Brown 2002; Finn 2005; Harrison 2001; Lücke, 1987; Wightman 1998). It is also worthwhile noting that the exact nature of the notion of good faith is also subject to considerable debate from time to time.

So where and when did the concept of good faith behaviours originate? Was it anchored in the desire for New Zealand to ratify and observe ILO Conventions? Or was it anchored in broader, but more general notions of incorporating fairness into New Zealand's employment relations? Or both?

All aspects of the employment relationship

As noted in the previous section, a duty to bargain in good faith is inherent to employment relations concepts such as freedom of association and the promotion of collective bargaining. However, the relational approach extends the notion of good faith to all aspects of the employment relationship and the employment environment. This extension goes beyond that which exists in most, if not all, employment relations legislation in developed countries. The intent to have legislation which governed the "overall management of employment relationships" (Clark 1993: 154) has been a concern of the Labour Party during the 1990s, with the argument that legislation should not focus on the "narrower objective of contract negotiation and enforcement" (Clark 1993: 54). It was not until 1999 however, that evidence can be found which directly links the concept of good faith with the broader notion of the employment relationship. Even so, the linkage between the two concepts is not developed and in fact, immediately

following the passage making the linkage, good faith is defined in terms of a duty to bargain in good faith in collective relationships.

Importantly, the legislation will require that the relationship between workers and employers are governed by good faith. The Act will set out that good faith bargaining includes an obligation to meet and consider proposals of another party, to provide information necessary for the purpose of bargaining, and so on. The duty to act in good faith will not imply a duty to settle a collective agreement (Hodgson 1999: 173).

So why did the notion of duty good faith bargaining get extended to all aspects of employment relationships?

Mutual trust and confidence

Recognition of the implied mutual obligations of trust and confidence in employment is the final key concept introduced by the relational approach. Like 'productive employment relationships', the preliminary document analysis does not uncover the term 'mutual trust and confidence' in Labour Party policy. However, the development of this concept and its inclusion in the relational approach is a process which was largely independent of party politics. The common law in New Zealand had begun to develop 'mutual trust and confidence' as an implied duty within employment contracts a number of years prior to its explicit adoption as a concept within the relational approach.

New Zealand Courts, as least since the decision of the Court of Appeal in *Auckland Shop Employees IUOW v Woolworths (NZ) Ltd* (1985) ERNZ Sel Cas 136; [1985] 2 NZLR 372 (CA), have developed the concept of 'trust and confidence' as a mutual obligation between parties to an employment contract and applied it as an implied term in the contract of employment (Brookers Online 2003: ER4.06).

It is worth noting that while this implied duty of mutual trust and confidence was being developed within the common law, the duty of good faith was not enjoying the same treatment. Furthermore, in the first version of the ERA, mutual trust and confidence was in a position of prominence with good faith behaviours in a subordinate position. In the 2004 amendments to the ERA, the concept of good faith was broadened, explicitly placing the notion of mutual trust and confidence in subordinate position.

So, was the inclusion of a common law principle in legislation a reflection of the notion of fairness which appears to run through Labour Party policy? If so, then why was a more developed concept (mutual trust and confidence) placed in subordination to a lesser developed one (good faith) within the legislation? What is the intended nature of the interplay between these two concepts?

Concluding comments

A review of the historical development of the four approaches to the legislative regulation of employment relations in New Zealand reveals that the most recent relational approach continues and extends a number of concepts and themes introduced in earlier approaches. Some of these concepts, such as the role of collectivism in employment relations have a long history dating back to the conciliation-arbitration approach of the late 19th century. Other concepts, such as voluntarism, are fairly recent developments in New Zealand, having been introduced during the modified conciliation-arbitration approach of the 1970s and 1980s and significantly developed during the contractual approach of the 1990s.

However, this review also reveals that the relational approach of the 21st century also introduces a series of four new concepts which are key underpinnings to the approach, namely, building productive employment relationships, good faith behaviours, all aspects of the employment environment and mutual trust and confidence. While some documentary evidence provides clues to the origins of some of these new concepts, some concepts – for example, 'productive employment relationships' – are not discussed or disclosed in policy documents. If we are to fully understand the nature and intent of the relational approach and its legislation, we must understand the origins of these new concepts. To do this further research is necessary. This paper has proposed a research framework of further document review and in-depth, semi-structured interviews designed to improve this understanding.

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Book Review by V. Hunt¹

***Developments in the Call Centre Industry – Analysis, Changes and Challenges* by John Burgess and Julia Connell (eds), Routledge, Oxon, 2006**

The last fifteen years have seen a proliferation of call centres throughout the world. Companies, seeking to compete, have had to provide a new form of customer service via the telephone. In some sectors this is required on a '24/7' basis. Call centres have attracted considerable academic interest as they are now a major source of employment, particularly for women who make up 70% of the workforce in the Australasia, UK and US call centres. In the main, the research findings have been negative about the Tayloristic labour process used to provide customer service and questions have been raised about whether this form of employment is a positive development in the world of work.

Developments in the Call Centre Industry – Analysis, changes and challenges, makes an important contribution to the relatively new call centre literature, which has only evolved since 1990. Therefore, it is understandable that the editors, John Burgess and Connell, signal at the beginning of the book that it is still a 'work in progress' and draw attention to the fact that this industry is rapidly changing and growing and thus issues will continue to emerge as the industry reaches maturity. In particular, they note how call centre technology, organisational change to facilitate the adoption of call centres and its impact on employment have all led to call centre service work being restructured, relocated and reorganised.

While this books charts the growth of the call centre industry, more importantly, it helps to establish the contextual influence on call centre research, an area which has to date been largely missing from the discourse. The book achieves this by including research from a number of different countries, and in particular from countries such as Korea, Greece and Sweden which have not been previously featured in the reported international research. The authors also include a variety of research approaches and employ both qualitative and quantitative methods to collect data on call centre work. Adopting this broad methodological approach has been beneficial in that the results have thrown up a number of additional and useful insights about call centre work and its development.

The range of research findings is also a key strength of this book for a number of reasons. First, it demonstrates both positive and negative aspects of call centre workplaces as well as the different human resource practices found in these workplaces. The findings reported in the book mirror the extant literature in that similar studies do not entirely paint a pessimistic picture of all call centre organisations and indicate that these types of working environments may not always be a negative experience for workers.

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Second, the range of work discussed in the book highlights the context-driven nature of call centre research. Underpinning this discussion is the essential question (which to date has not been addressed) – namely: “How do different political and socio-cultural regimes impact on the workplace?” By investigating the employment arrangements used in the call centres of the different countries, the book goes further than most others in answering this question.

Third, the wide range of studies and approaches reported in the book precludes an analysis that adopts a singular and narrow theoretical framework, thus providing a useful contribution to theory. That is, some of the studies draw on Foucault and labour process theory; but there is no central theme to the analysis of the research or linking to a single body of theory. The absence of a central theme and core theory are not necessarily detrimental as call centres are heterogeneous, microcosms of workplaces and are more likely to reflect national employment regimes and the political, social and economic environment in which they operate. In other words, context matters and advocating one over-riding theory to explain all call centre research would be problematic.

The book opens with a chapter on ‘off-shoring’ by Srivastava and Theodore who establish a meta perspective of call centre work within the global labour market. They discuss the key drivers of call centre location and the importance of call centre work as a source of employment in the knowledge intensive economy. Chapter 3, by Taylor and Bain, continues the off-shoring discussion by looking at the issues of UK companies relocating to India. Taylor and Bain have worked in this field for over 10 years and are widely acknowledged as the leading experts on call centre research. It was with great sadness to learn that Peter Bain has recently died. His research on call centres and his contributions and insights on the topic will be sorely missed.

Chapters 4 and 5 are based on surveys in call centres in Germany (Weinkopf) and Korea (Lee and Young Kang). Against a background review of studies in Germany since the end of the 1990’s, Weinkopf analyses data collected in a survey of 650 call centre employees across 14 call centres. Findings on job quality, design, employee satisfaction, HRM and IR in this survey confirm a broad variety of features and HRM practices in use in German call centres. Weinkopf demonstrates that the ‘sweatshop’ or ‘dark satanic mills’ image of call centre work does not prevail and that there is a relatively high level of overall employee satisfaction (84.6 per cent of respondents are satisfied or very satisfied with their jobs). However, she notes that there is still room for improvement as call centres appear to be marginally attached to the German labour market regulations and institutional frameworks. In particular, call centres which are not part of a larger company as in-house operations, tend not to have any collective bargaining arrangements in place.

The research on Korea shows that call centre work is a very new form employment with 60 percent of call centres operating since 2000. Employment relations appears to be externalised with over a third of call centres being outsourced and those operating in-house call centres, employ in the main, non-regular employees. The authors explain that in Korea, call centres use hybrid work organisation where intense real-time monitoring is used to control staff who, are also given a degree of work discretion. They note, that unlike the international research in Europe, US and Australia, there

has been little social capital development with limited public resources and few networks created in this sector.

In Chapter 6 Bob Russell discusses the skills required to perform what he calls 'infoservice' work in Australian call centres and how the problem of matching the expectations of the job with the characteristics of the job is leading to the high turnover rates in the industry. His findings demonstrate that the work in three out of four of the centre studies is to some degree more sophisticated than the semi-skilled assembly line work normally associated with call centres and yet is still some distance away from the type of work and skills required to operate in the 'knowledge economy'. His research highlights the huge variations in skill requirements within the call centre industry and advocates the need to match recruitment of staff with the complexity of the work to be done.

In Chapter 7, Susan Durbin accounts for the barriers which prevent women from developing careers in four call centre case studies located in two UK financial institutions call centres. She questions whether women are held back because of their "soft" skills and, because call centres are still patriarchal institutions that "keep women in their place". Her findings are mixed, however. In one of the case studies, female staff progress into senior management roles while in the other case study, they do not. Call centre work was the only employment most of the female respondents could find and half of all them had experienced 'perceived' or 'real' barriers to career development. These included; a lack of management training, no role models in management jobs, and male stereotyping of women skills. However, despite their obvious lack of career development, half the respondents interviewed said they were very happy with their career progress to date.

The remaining chapters 8 to 11 present both the trade union and employer perspectives. In Chapter 8, Rainnie and Drummond discuss community involvement in the development of a union in a re-located call centre situated in a green-field, mono-industrial site in the Latrobe Valley. This account gives the organiser's perspective of mobilising a union and provides practical insights about community involvement in the union forming process. It highlights the importance of informal and social networking to develop a collective culture and adds to a growing debate on community unionism. The research has wider significance as call centres relocate from city to small towns in search of lower costs. Traditional unions can learn from the success of social capital development that takes account of the community in this workplace organisation.

Chapters 9, 10 and 11 cover managerial practices and work organisation in call centres, commencing with Houlihan's ethnographic work. Based on her full participation in a call centre in between 1997 and 1999, Houlihan's study is important, not only because of its method of data collection, but also because it focuses on the experience of the managers, a perspective frequently missing in the discourse on call centres. Although the findings are mixed, Houlihan demonstrates that the same rules and systems apply to managers who may also resist some of the call centre daily working practices.

Chapters 10 and 11 illustrate convincingly that political, social and economic environment are important factors when analysing call centres. In Chapter 10, Koskina tests the level of Tayloristic practises in Greek call centres. She finds that the culture and social norms of Greece are so entrenched that none of the call centres in her study used the call centre technology to drive the labour process but instead relied on high levels of trust and autonomy. This provides evidence that national institutions and culture play an important role in how call centres are organised. In the final chapter, Lindgren and Sederblad investigate workers' autonomy in Swedish call centres. The authors note that the negative aspects of call centre work are offset by compensation, lots of breaks, amenities, private space and in one case low call quotas.

This book is well organised and deals with a number of employment issues across different countries. It provides a range of research studies to provide practical insights about outsourcing, HR call centre practices, union organisation, skills development and career opportunities for female call centre staff. Particularly valuable is the different approaches use to analyse the call centre literature. The book will stimulate new questions and research from call centre practitioners, academics and students alike.

Chronicle June 2006 to September 2006

June 2006

The debate around the Employment Relations (Probationary Employment) Amendment Bill continued (see May Chronicle). In the *Dominion Post*, one of the Council of Trade Union leaders, Carol Beaumont, wrote that the Bill attacked the rights of every employee in New Zealand. Ms Beaumont slated the Bill as unnecessary, unfair and unproductive. As every New Zealander changed jobs, on average, about six times in their lifetime, it was estimated that, at any one time, around 300,000 workers would be with be covered by the probationary provisions. However, the Bill's promoter Dr Wayne Mapp responded by stating that the "union movement is still living in the world of class struggle" and that "the reaction from union quarters has actually been quite hysterical and over the top". He concluded that the Bill would help new workers and assist those on the margins of the labour force "to get a foot in the door".

The future of the Bill started to look uncertain when United Future said it would oppose that people, who changed jobs, would be subject to its provisions. While agreeing with the probationary provision applying to new employees, the leader of United Future, Peter Dunne, stated that it would be problematic if the Bill meant that every time a worker changed jobs then they would have to endure another probationary period. In response, Dr Mapp acknowledged that he may need to soften the Bill if it was to pass. He also suggested further changes such as the inclusion of an employers' code of conduct and limiting the Bill to smaller workplaces. The National Secretary of the engineering union (EPMU), Andrew Little, rejected the proposed code as being toothless and unenforceable.

Besides the Employment Relations Amendment Bill, industrial unrest in the health sector featured prominently in the media. The strike by junior doctors became a reality and it received extensive, often negative, coverage in the media. The *Press* reported that the dispute was over working hours, with the Resident Doctors' Association (NZRDA) saying that a 72-hour maximum working week was too long. The Association also rejected a proposal of a joint committee to negotiate changes to hours and rosters. Several newspapers highlighted that contingency planning saw consultant doctors, not normally rostered to work at hospitals overnight or weekends, being offered about \$200 an hour as an inducement to cover the shifts usually staffed by junior doctors.

The strike action by junior doctors prompted a string of critical media comments. The *Press* stated that the junior doctors' case seemed weak and while the employer, the District Health Boards, appeared "calm and reasonable, the rhetoric emerging from the doctors' union has been characterised by the kind of stridency that would do credit to the cloth capped secretary of a miners' union". The *NZ Herald* joined in the rhetoric when it suggested that the delays caused to patients were "calculated and cruel" and accused the NZRDA of "needless industrial theatre". The article also recalled similar claims of punishing rosters by the Association in 2004, 2003, 2001 and 2000. The *Sunday Star Times* reported that union leader Deborah Powell's job could be on the line in the wake of the industrial action as many regarded it as a costly failure. The article claimed that a rift between junior doctors and hospital

management was widening, while fractures were also appearing between senior and junior doctors as well as within the ranks of junior doctors.

Further criticism of the junior doctors came in a *NZ Herald* editorial which commented somewhat ironically that it hoped that the doctors used their time profitably and eliminated the sleep deficits which they believed made them so potentially dangerous to patient welfare. The editorial claimed that the strike was not about specific changes to working hours, an increase in the rate of pay or allowances or conditions. Instead it was about the mechanics of how the two parties negotiated those issues.

The *Nelson Mail* also featured critical articles about the junior doctors' strike. Before the planned five-day strike by junior doctors went ahead, it reported that Nelson Hospital would be forced to postpone all but urgent surgery and concentrate on emergency services. In a later *Nelson Mail* article, an advocate for New Zealand's District Health Boards accused junior doctors of using "cynical" delaying tactics to frustrate the organisation of emergency cover for the planned strike and added that it had been difficult to get any cooperation from the union and junior doctors.

After the strike, the *NZ Herald* reported that signs were looking positive for a settlement. General Secretary of the Resident Doctors' Association, Deborah Powell, said the parties were "working on a new way forward".

Several newspapers reported that the 'Metals' multi-employer collective agreement. Both the Press and the Dominion Post reported that the "Metals" collective deal had been settled at 4.25%. The Metals agreement covered over 2000 workers at about 180 companies and has been regarded as a benchmark for agreements covering other manufacturing businesses. The Engineering, Printing and Manufacturing Union had initially claimed 7% which was labelled as 'crazy' by a Canterbury manufacturers group. While conceding that 4.25% was a more realistic figure some manufacturers warned that the increase could threaten jobs as it would make them less competitive against Chinese manufacturers.

The *Dominion Post* reported that the Employment Court had ordered Farmers Holdings to pay a former executive, Gijs Faber, a bonus of \$120,000 for staying with the company through its sale negotiations. Mr Faber resigned without being informed of the company's pending sale and he was never paid the bonus. The Court ruled that withholding the sale information was a breach of the employer's good faith obligations under the Employment Relations Act.

Two decisions of the Employment Court regarding wrongful dismissal of employees featured prominently in the media. In one of the first cases to come before the Employment Court since amendments to the Employment Relations Act in December 2004, the Court found that Air New Zealand had acted wrongly in dismissing an employee. Air New Zealand dismissed the employee after investigating complaints laid against her for poor service and an admission that she pushed a co-worker during a dispute. The Court said that the amendment to the Act changed how employers dealt with employees, shifting the focus from what the individual employer thinks is the best way to handle the situation, to what a "fair and reasonable" employer would do. The Court found that a fair process might have resulted in a justified dismissal

but Air New Zealand failed to talk to all the relevant parties involved, thereby failing “properly to weigh all the circumstances under which the alleged misconduct occurred”.

In a second case, the *NZ Herald* reported that the Employment Relations Authority ordered an employer to pay \$2,400 to a plasterer who wrote graffiti on a client’s house. The Authority ruled that the employee did not get an unequivocal warning that his job was at risk. The employer labelled the decision “ridiculous” and was seeking legal advice about whether to appeal the decision.

The CEO of the Employers and Manufacturers Association, Phil O’Reilly, argued that the two cases highlighted real problems with dismissal law in New Zealand. He claimed that in each case the dismissal was warranted but the employer had to pay because the employer did not go through all the proper procedural steps to dismiss the employees. He supported his stance further by pointing to an Employers and Manufacturers Association (Northern) report which had identified a 28% rise in grievances in the past year, with awards for hurt and humiliation averaging about \$5000. Mr O’Reilly called for the Employment Relations Act to be simplified and clarified, including the introduction a probationary period for new employees.

The *Dominion Post* reported a dramatic increase in personal grievance claims lodged by staff against Child, Youth and Family Services. Answers to parliamentary questions showed that 24 personal grievance claims had been lodged against Child, Youth and Family Services in the year to August 2002 while in the period between January 2005 and March 2006, there were 45 claims.

Tens of thousands of people congregated in Australian cities to protest against new employment relations laws (the so-called “Work Choices” legislation). The *NZ Herald* wrote that the laws, which removed many rights and conditions that had protected workers for decades, were a defining battleground for the next federal election (expected to be held in the second half of 2007).

The *NBR* took issue with a report released by Standards New Zealand. The report intended to set out best practice for evaluating job positions within an organisation and in the market. The report was intended to eliminate any gender biases that might privilege male or female dominated occupations or positions. The *NBR* claimed somewhat ironically that the report would allow New Zealand to “stake a claim for being the most politically correct country on the planet” and that there are fears the government’s internal review of gender pay equity would encroach on the private sector after the Department of Labour had commissioned Standards New Zealand to develop the national standard.

July 2006

The debate over the Employment Relations (Probationary Employment) Amendment Bill continued (see June Chronicle) as the union movement held a number of protests to voice their opposition to the Bill. The *Taranaki Daily News* reported that 100 Fonterra cheese workers marched through Eltham while the *Dominion Post* reported

that a contingent of 600 protested on Parliament's lawn. The promoter of the Bill, Dr Wayne Mapp, was loudly booed when he tried to address the crowd.

The Transport and Industrial Relations Select Committee hearing on the Bill started near the end of July. The *Nelson Mail* reported that the CTU president Ross Wilson told the committee that the Bill was an attack on the fundamental human rights of the most vulnerable employees. The Bill's promoter, Dr Wayne Mapp, said that the Bill would allow employers to give a chance of work to young people and others types of employees without fear of personal grievance cases if they were not up to the job. Dr Mapp told the Select Committee that his main purpose was to help groups, such as Maori, immigrants and women returning to the workforce, who found it difficult to break into employment. Dr Mapp conceded that the Bill might need to be amended to shorten the 13-week benefit stand-down for employees who did not get a job after 90 days, and include voluntary employer codes of conduct as well as shorter probation periods for casual workers. The *Dominion Post* reported on clothing manufacturer Douglas Voon who had a clear impression of the Bill. Mr Voon said the Bill would stop new employees from taking personal grievances in their first 90 days on the job and would allow small businesses to test staff.

Another contentious piece of legislation was before the Transport and Industrial Relations Select Committee. The *Dominion Post* reported on the select committee hearings into Green MP Sue Bradford's Bill to remove the distinction between youth and adult minimum wages. Fifteen-year-old schoolgirl Ashleigh Saunders, who works at a supermarket, was part of a National Distribution Union delegation submitting on the Bill. National MP Wayne Mapp said that paying all workers the adult rate would increase prices, especially as there were moves to introduce an adult rate of \$12 an hour.

The *Dominion Post* reported that the New Zealand Fire Service Commission was given leave to appeal against the decision of the Employment Court to grant a day off to firefighters for each public holiday worked. The Fire Service estimated the decision could cost millions as it meant that firefighters would also be entitled to back pay to 2004, when the Holidays Act 2003 took effect.

The *Timaru Herald* reported that a collective agreement was reached with boning room workers at the Smithfield freezing works. The settlement of the agreement would mean that a planned \$11m upgrade could proceed. Following a two-year impasse between workers and management, there had been fears that the freezing works would close with the loss of 500 jobs.

Numerous strikes occurred throughout New Zealand during July. Industrial action struck Wellington rail commuters as rail track workers from the Rail and Maritime Union sought a \$1.38 increase in their hourly rate of \$14.84. The *Dominion Post* highlighted the owner's – Ontrack - claim that wage demands would cost \$4.2m. However, the company offered to meet the union through a mediator.

Air commuters were also affected by industrial action. The *Press* reported that some flights in and out of Christchurch were cancelled because of continuing industrial action by Mt Cook Airline pilots. Flights were disrupted because some pilots had

been sick and other pilots would not cover shifts beyond those that they had already been rostered on.

The fallout from the junior doctors' strike continued during July. The *Sunday Star Times* and the *Dominion Post* reported that hospitals were refusing to hand over pay records to the doctor's union amid fears strike-breaking doctors might become the target of a union witch-hunt. The Resident Doctors' Association was demanding to know what its 2000 doctors were paid during the period of the strike, igniting a fresh dispute with health boards. While the RDA said it simply wanted to ensure its doctors were paid correctly during the strike, sources from several hospitals believed it was an attempt to discover which doctors broke the strike.

The *Southland Times* reported that sixty of its staff took industrial action over contract negotiations. The National Secretary of the Engineering, Printing and Manufacturing Union (EPMU) Andrew Little said the union members were frustrated that, despite long negotiations and mediation, the company was refusing to provide the same conditions as staff at other Fairfax-owned papers in New Zealand.

The *Press* reported that Canterbury meat processors who supply Progressive Enterprises supermarkets began a five-day strike. NZ Meat Union Canterbury spokesperson claimed that the processors were earning 30% to 50% less than industry standards. The union was seeking a 16-month collective agreement with a 12% pay rise, which would take workers up to \$15.50 an hour in a first step towards pay parity with others in the industry.

The *Press* reported that Child, Youth and Family (CYF) denied poor management was behind an exceptionally high number of personal grievance cases taken by its staff (see June Chronicle). The union claimed that the complaints were indicative of poor management culture and low staff morale. In a reply to an Official Information Act request, CYF's Chief Executive Peter Hughes stated that the 43 personal grievances lodged in 2005 represented only 1% of all staff.

Both the *Dominion Post* and the *Press* reported that the dismissal of four Christchurch based Air New Zealand engineers for accessing inappropriate internet sites was found to be unjustified. The Employment Relations Authority ordered the airline to reinstate the workers and pay them \$76,695 in lost wages and compensation. The airline announced it was likely to appeal the finding.

The *NZ Herald* reported that finance company Hanover Group was ordered by the Employment Relations Authority to pay a former CEO \$750,000, plus interest of more than \$50,000. The CEO was originally made redundant but Hanover then alleged he breached a restraint of business deed when he accepted a CEO position at a rival company, one month before his effective resignation date. The payout was believed to be the biggest the Authority had awarded since it was established in 1999 and possibly the biggest in New Zealand employment law history.

A number of articles appeared in the media relating to the Employment Court decision in *Air New Zealand v Hudson* (see June Chronicle). An article in the *Dominion Post* claimed that the new test introduced under the Employment Relations Amendment to the Act was helpful to employees because it created a harsher test for

an employer to justify any decision to dismiss. The article went on to say that before the amendment the test depended on whether there was a fair investigation into the allegations of misconduct and if this requirement was met, then the test was whether the employer had an honest belief, based on reasonable grounds, that serious misconduct had occurred. Generally, if there was a fair and thorough investigation there would be grounds upon which an employer could form that view. The new test allowed the Employment Court to substitute the objective test of the “reasonable employer”. The *NBR* stated that the new test highlighted the need for complete objectivity by the employer.

August 2006

The Employment Relations (Probationary Employment) Amendment Bill continued to receive widespread media coverage (see July Chronicle). In an article reporting on the select committee hearings, the *Press* commented that, judging by the diverse views expressed on the Bill, it was sometimes difficult to work out if supporters and opponents were talking about the same piece of legislation. By late August, however, the *Dominion Post* predicted that the Bill was doomed after the Maori Party indicated it would withdraw its parliamentary support.

An article in the *NZ Herald* suggested that, according to the Human Rights Commission, New Zealand employers could potentially advertise for non-smokers only, without violating the Human Rights Act. A spokesperson from the Department of Labour appeared to support this interpretation when the spokesperson agreed that smoking fell outside the Employment Relations Act. Anti-smoking lobby group Ash stated that while it could understand employers wanting non-smoking employees, it opposed employers deliberately hiring non-smokers.

The transport and industrial relations select committee presented its report on the Employment Relations Amendment Bill. The Bill was the second attempt by the government at extending job security to employees in the catering and cleaning industries. In 2005, the Employment Court found the right to transfer employment only applied where an organisation was contracting out a part of its work that was currently done in-house, not to so-called “second generation” contracting.

The *Press* reported that Mount Cook Airline and its pilots had agreed to renew talks in order to break the deadlock in a year-long dispute which had caused hundreds of flight cancellations and disrupted the travel of thousands of passengers (see July Chronicle). Mt Cook Airlines was successful in its application to the Employment Relations Authority for facilitated bargaining. The dispute related to twice yearly courses in Bangkok that pilots were required to complete to maintain their flying licence. The pilots association had insisted that the pilots flew business class to Thailand, while Mount Cook wanted them to fly economy.

Meanwhile, the troubled health sector again featured prevalently in the media. The *Dominion Post* reported that senior doctors would return to the negotiating table after the Association had claimed that an 8% pay rise was needed to ensure that their salaries remained competitive. The Executive Director of the Association of Salaried Medical Specialists Ian Powell pointed to that, in response to workforce shortages,

salaries offered to Australian senior doctors in New South Wales and Queensland had increased significantly this year.

The *Dominion Post* also reported that junior doctors were considering more strike action as their union accused District Health Boards of deliberately stalling negotiations. The General Secretary of the Resident Doctors Association Deborah Powell said the boards had begun delaying talks in order to force doctors out of existing employment conditions. Dr Powell said that information about the boards' "tactics" had been sent to members and they were deciding what action to take (including strike action). DHB Spokesperson Nigel Murray said that Dr Powell's comments were irresponsible and designed to drum up support for another strike.

The spectre of strike action from yet another group of health sector employees was reported in the *Southland Times* as radiographers, working in hospitals in six District Health Boards confirmed dates for a three-day strike. The National Secretary of the Association of Professional and Executive Employees Deborah Powell said the radiographers wanted parity in wages and conditions with colleagues who settled their collective agreement last year. A DHB Spokesperson said that employers would like to have a nationally consistent set of terms and conditions for radiographers but this was not achievable in the short term.

The *Dominion Post* reported that former academic Michael James lost a battle over his dismissal by Unitec in 2003. Mr James, who was the former head of the design school, had been dismissed for waiving the course fee of a female student he was pursuing a relationship with. The Employment Relations Authority determined that the dismissal was justified.

The *Press* reported that the Christchurch City Council was ordered to pay \$32,500 to an employee for failing to prevent his stress and ill health. The employee, who worked for the council for over 10 years and was former team manager, took the council to court (seeking \$200,000 in compensation) after he suffered stress in his job. The Employment Relations Authority found that the council had caused harm by not recognising the employee's stress. His immediate manager knew that he was in difficulty but did not inform senior management or human resources staff.

The *Dominion Post* reported that the woman, who forced the Corrections Department to change its Maori cultural practices policy, was told she could not get legal assistance to pursue a Human Rights Commission complaint. This was despite that the Commission's legal office admitted: that her rights were likely to have been breached, that Corrections had discriminated against women in holding a Maori farewell ceremony and that resolution of her complaint would "affect a large number of people".

Both the *Waikato Times* and the *Independent* featured the findings of the Industrial Centre's 13th Annual Report on employment agreements, bargaining trends and employment law. When presenting the report findings in a seminar in Hamilton, Professor George Lafferty suggested that wages were only starting to catch up with recent favourable economic conditions after years in the doldrums. The report stated "there have been significant gains for many workers in low-paid industries where wages had fallen behind in the 1990s. So they appear to be eventually gaining some

benefits from an extended period of economic growth, increased profitability, skills shortages and low unemployment.” In the past couple of years, unions had “built up their confidence” and collective agreements for nurses and in the metal and manufacturing industries had helped to set the platform for better pay and conditions for workers. According to the report, which covered collective employment agreements for parts of 2005 and 2006, 82 per cent of workers surveyed had wage increases between 2% and 4.9% in 2006. Over the past 15 years, the average increase for collective agreements had been a “modest” 2.3% each year. The report advocated that more focus was needed on “vulnerable” workers, those on minimum or youth wages and on developing work-life balance.

The political row over Labour MP Taito Phillip Field had an employment twist when the *NZ Herald* reported a Labour Department finding that there was no basis for inquiring into allegations that he breached the Minimum Wage Act with payments made to Thai workers who painted his houses. The Department stressed that the painters were in a contracting relationship, not an employment one, and were, therefore, not covered by the Employment Relations Act. The Department’s comment came after National MP Wayne Mapp lodged an official complaint with the department about Mr Field in July, after the release of the report by Noel Ingram QC into the Mr Field’s relationship with a group of Thai people he had given immigration assistance to.

The *Dominion Post* reported that the former Managing Director of Air New Zealand Ralph Norris received a final payout of \$1.06 million from the airline after he left in 2005 to start a \$7.6 million-a-year job as head of the Commonwealth Bank of Australia. His payout consisted of an \$853,417 bonus for his final year at Air New Zealand and \$208,705 salary for the first two months of the 2006 financial year before he left.

September 2006

Media reports on employment relations were dominated by two very high profile strikes. The health sector was again prominent but a long bitter dispute between Progressive Enterprises and its distribution workers also featured.

The month started with the news that striking distribution workers and their employer - supermarket chain Progressive Enterprises - were ordered back to mediation in a bid to end a week long strike. The striking workers were demanding wage increases and a national collective agreement for all three distribution centres owned and operated by Progressive Enterprises. The workers’ union - the National Distribution Union - had originally sought an interim injunction to stop the employer from using non union labour to break the strike. While both parties stated in the media that they looked forward to resolving the dispute the parties soon became deadlocked when 500 workers were locked out of Progressive Enterprises Auckland, Christchurch and Palmerston North distribution centres.

There were also media reports that violence had broken out on picket lines. In Christchurch, picketers harassed a worker trying to enter the distribution centre and shook his car. A Progressive spokeswoman described the Christchurch picket line as

“particularly militant”. But the National Distribution Union’s Spokesperson Laila Harre said it was inevitable “tensions will run high” as workers tried to keep strike breakers away from the distribution centres.

During the strike’s second week, the *Press* suggested that the dispute was as much about public relations as it was about pay rises and costs of the agreement. The *Press*’ Editorial claimed that the National Distribution Union was anxious to paint Progressive Enterprises as a foreign company indulging in aggressive industrial tactics imported from its Australian home. The *Press* also evaluated that the union appeared to be winning the publicity battle.

The *Sunday Star Times* featured the impact of the prolonged strike on two of the striking workers. The young married couple from Mangere said that two weeks with no pay was putting a strain on their finances and that they could no longer meet their loan and car repayments. The couple said that they never expected the initial two-day strike would end in a lockout. Still, they had no regrets as they thought they were fighting for a “good cause”.

According to the *Press*, the National Distribution Union and the Engineering, Printing and Manufacturing Union were shocked that Progressive Enterprises appeared to want union members to give up their right to bargain. Other unions had started to mobilise support of the striking workers. The article posed the question of whether unions were finding their “mojo” again after the Employment Contracts Act had emasculated them in the early 1990s.

Three weeks into the strike, the *Dominion Post* suggested that the dispute had united unions in New Zealand and around the world. Donations to the striking workers’ fund were coming from Australia and the United States. It was also reported that watersiders in both Australia and New Zealand were considering blocking the containers of Progressive Enterprises at the ports. However, Progressive Enterprises said it was willing to negotiate a reasonable deal with workers under the three existing collective agreements. As the strike entered its fourth week, the parties settled after two days of mediation.

Meanwhile, the health sector faced more industrial action when radiographers announced a three-day strike. Radiation technologists from seven District Health Boards (DHBs) were seeking a multi-employer collective agreement with the same pay and conditions as their counterparts in the North Island. As a result, hospitals had to postpone scheduled operations and could only treat severely ill patients. The *Press* highlighted that the radiographers had announced that they would follow the initial strike with a one-day strike and their union also warned of the possibility of a third strike. A spokesperson from the DHBs claimed the second notice was “deliberately and cynically timed” to have the maximum impact on patients.

The strike went ahead as planned leaving hospitals in "emergency mode" according to the *Press* as the care of thousands of patients was disrupted. The radiographers had agreed to work only on people who were in life-threatening situations but the Otago District Health Board was accused of breaking this understanding, according to reports in the *NZ Herald*.

The second strike by radiographers went ahead, although a Spokesperson from the DHBs argued that the strikes could have been prevented had the radiographers' union - Apex - been prepared to compromise. The DHBs had agreed to meet the union's pay demand but the pay rises would be paid over 2.5 years, instead of 2 years.

By the end of September, the radiographers returned to work with the promise of renewed negotiations. Neither side was prepared to discuss the strikes or the talks, with the union promising to "give the rhetoric a rest" as they sought an exit from what was claimed to be an expensive impasse.

However, the *Dominion Post* reported that yet another group in the health sector had announced intentions to take industrial action. Negotiations between the senior doctors and the District Health Boards appeared to have reached an impasse (see August Chronicle). The Executive Director of the Association of Salaried Medical Specialists Ian Powell argued that the union had made significant compromises but the boards had adopted a hard line. Although there was no plan to strike, this could not be ruled out. The DHBs had offered the senior doctors an increase of about 7% over three years, compared with the 29% over four years awarded to senior doctors in New South Wales.

The *Dominion Post* reported on a bizarre case at the Employment Relations Authority which involved a crane operator. The crane operator had confessed to his employer that he had an alcohol problem. Subsequently, he was dismissed for failing a breath test when he said he had not been drinking. The Authority determined that he had been unfairly dismissed. When the employee voluntarily admitted that he had an alcohol problem a rehabilitation agreement was drawn up which required the employee to complete a detoxication programme, attend a medical course and agree to random breath tests. The employee was told that, if a random breath test found traces of alcohol, he would be dismissed. These requirements were found to be "punitive and not rehabilitative" as they were in effect a "one strike and you're out" scenario.

The *Dominion Post* reported that according to a human resources specialist, workplace bullying was widespread in New Zealand. The specialist claimed that if she talked about the problem to a roomful of 100 people, "60 to 70 of them will be nodding their heads, knowing just what I am talking about". She also claimed that there was virtually no place for people to turn to for help. Employers were urged to get rid of bullies "as fast as possible" as the ongoing effects on individuals and companies could be devastating.

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