Contents Page: NZJER 32(3)

Name	Title	Page
		Number
Gail Pacheco	The Changing Role of Minimum Wage in New Zealand	2-17
Prue Hyman	Pay Equity and Equal Employment Opportunity: Developments Between 2004 - 2007 and Evaluation	18-30
Goldie Feinberg-Danieli and George Lafferty	Unions and Union Membership in New Zealand: Annual Review for 2006	31-39
Bill Cochrane, Michael Law & Gemma Piercy	Industry Training Organisations in Changing Times: New Research Possibilities	40-55
John Gibson	Public Sector Pay Premium and Compensating Differentials in the New Zealand Labour Market	56-68
Thomas Lange	Commentary Revisiting the Job Guarantee: Ten Propositions towards a Model for New Zealand	69-82
Colin Ross & Erling Rasmussen	Chronicle June 2007 to September 2007	83-

The Changing Role of Minimum Wage in New Zealand

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Abstract

This article provides a descriptive portrait of the changing characteristics of workers in New Zealand earning at or below the minimum wage in the last decade. With substantial increases made to both the adult and youth minimum wage over the last 10 years, the variety of impacts the minimum wage can have on a labour market need to be explored. Much of the increase in the adult and youth minimum wage in NZ has occurred post 2000. This therefore, presents as a unique opportunity to compare two key time periods of pre and post 2000 in order to highlight which sub-groups of individuals are more at risk (in terms of their employment status) when the minimum wage is raised. One of the main findings is that age appears to be the most important factor in determining minimum wage status.

Introduction and Background

Minimum wage legislation represents the role of the state in regulating the level of wages in the labour market. It is one of the oldest and most basic forms of income protection. Such legislation usually has tremendous public policy implications. This can be seen by the sheer number of workers that are affected by changes in the minimum wage. In the United States (U.S.), in 1995, nearly 2 million workers received the \$4.25 federal minimum.¹ It is also estimated in the U.S., "that more than 60% of all workers have worked for the minimum wage at some time during their careers" (Card and Krueger, 1995:5).

While a rise of the statutory minimum wage can lift the income levels of low paid workers, there may also be negative employment effects. Consequently, whether or not to increase the minimum wage is a common question debated by politicians. In a 1990 survey of New Zealand (NZ) economists, 72% of respondents generally agreed or agreed with reservations that a higher minimum wage increases unemployment among young and unskilled workers (Coleman, 1992). An even higher proportion of economists were concerned about the ill effects of minimum wage rises in the U.S. and Australia. In a 1990 survey of over one thousand economists in the U.S., 78.9% agreed, or agreed with provisos, that a minimum wage increases unemployment among young and unskilled workers (Alston et al, 1992). Similarly, in a 1992 survey of Australian Economics Professors, 84.9% was the comparable figure for agreeing or agreeing with provisions² to the same proposition (Anderson and Blandy, 1992).

These beliefs by the majority of economists are more than likely rooted in the standard textbook prediction that a binding wage floor such as an effective minimum wage reduces employment of the affected workers. These workers are generally believed to

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be younger and less skilled. This expectation of dis-employment is based on the long held assumption that labour markets are competitive, and is also backed by numerous empirical studies (e.g. Brown et al, 1982) finding a negative relationship between minimum wages and employment levels in the low-wage labour market. However, several studies since the early 1990s have emerged that do not find significant negative employment effects of the minimum wage, and in some cases, even find positive employment effects. Studies such as Wellington (1991), Katz and Krueger (1992), Card and Krueger (1994, 1995) question the theoretical basis for negative employment effects. Most new research along this vein has relied on quasi-natural experiments and cross-sectional or longitudinal data, in comparison to the time-series evidence produced in the past³.

Other studies have found negative employment effects from the minimum wage, (e.g. Neumark and Wascher, 1992; Kim and Taylor, 1995) that are more in line with the traditional view. Overall, research into the effects of the minimum wage has most definitely experienced an upsurge, and writers on either side of the debate have rigorously questioned each others findings (e.g. Card et al, 1994; Neumark and Wascher, 1995; Deere et al, 1995)⁴.

In the NZ context, there has been limited research into the impacts of the minimum wage in this country, which also has produced inconsistent results. Issues with past studies⁵ have been lack of data, difficulty in choosing the appropriate model specification and not knowing which groups of individuals are most likely to be impacted by rises in the minimum wage. It is therefore understandable why one of the main motivations for carrying out the work contained within this study is the ability to access individual unit-record data from the Household Labour Force Survey - Income Supplements (HLFS-IS) from June 1997 to June 2004 in the secure data laboratory of Statistics NZ. The use of this data over this time period allows determination of which individuals earn minimum wage or below it. As already stated, the other motivation for this analysis is the large increases in the minimum wage for both adults and youth in recent years. To date, there has been only one study on the youth minimum wage since its introduction in 1994 (Hyslop and Stillman, 2004). The lack of past studies on the impact of the minimum wage in this country is hard to understand since the relative minimum wage⁶ in NZ has been higher than the comparable measure for the U.S. since the mid-80s and has also experienced more variation (Pacheco, 2007). Therefore, the 'bite' of the minimum wage in this country certainly seems to be larger than the U.S., where the bulk of the minimum wage research emanates from.

NZ was in fact the first country to introduce minimum wage regulation in 1894, through its establishment of arbitration boards with the Industrial Conciliation and Arbitration Act. During this early time period, minimum rates for men and women differed. For example, in 1949, the Arbitration Court set the minimum rate for women at 70% of the male rate. By the 1983 Minimum Wage Act (MWA), both men and women were on equal footing.

Section 4 of the 1983 MWA stipulates that the Governor General may "by Order in council, prescribe the minimum rates of wages payable to any class or classes of worker" (s4, MWA). Class is defined as a particular age group in this Act. The Act

initially set a binding wage for all workers aged 20 years old or above, and in 1994, the youth minimum was introduced for 16-19 year olds.

During this time, and through most of the twentieth century, a system of occupational "awards" determined wages and governed employment relations. Basically, employers were expected to adhere to the minimum wages and other conditions contained within an award and all workers had to be a member of the union that negotiated the wages and conditions. This system was weakened with the introduction of the Labour Relations Act (LRA) in 1987 and met its final demise with the Employment Contracts Act in 1991. With the ending of the award system, the statutory minimum wage has possibly become more effective as a wage floor, in comparison to under the prior award system (Chapple, 1997). This is because, if most workers were covered by an award and the minimum wage fell below award minima, then statutory minimum wages were likely to have had little influence on the wages of low paid adult workers.

Workers in NZ "must be paid no less than the statutory minimum wage for your age whether you are a full-time, part-time or casual employee, a home-worker, or paid wholly or partly by commission or on a piece rate" (Contract, May 1994:12)⁷. There are very few exemptions from paying the minimum wage in this country. It does not apply to those who hold under rate permits⁸, and until June 2003, didn't apply to persons undergoing training recognised under the Industry Training Act.

The remainder of this paper is organized as follows: Section 2 provides a summary of the changes to the minimum wage since the introduction of the 1983 MWA and over the last 20 years. Section 3 presents a brief outline of the unit record data that allowed in-depth analysis into the characteristics of minimum wage workers and also illustrates the changes to the minimum wage that have occurred over the sample period under study (1997 to 2004). Section 4 investigates the changing size of the number of workers affected by the minimum wage over the period of 1997 to 2004 and summarises some of the main impacts affected workers and their employers may experience with continued rises in the minimum wage. Section 5 then investigates the changing characteristics of minimum wage workers in NZ, to show which types of workers are most at risk in recent times, and section 6 of this paper finishes with summarising the main conclusions.

Changes to the minimum wage

Figure 1 illustrates the trends in the real minimum wage (in constant June 1999 dollars) for the three main age categories (youth: 16–17 years, 18-19 years, adults: 20+ years) over the period 1984 to 2004. The diagram displays a common trend in the real minimum wage, where legislated increases in the minimum are quickly eroded by inflation. This appears to be particularly prevalent for the adult minimum in the 1980s when the yearly inflation rate averaged at 11.9%, compared to the 1990s when the corresponding average inflation figure was 2.1% in NZ⁹.

The real minimum wage figures graphed in Figure 1 are produced using the consumer price index as the deflator. The reason why the minimum wage increases are not benchmarked against the average wage, which is commonly done in overseas studies, is due to the difficulty in finding reliable average wage information in NZ for specific age

groups prior to the introduction of the Income Supplement in 1997. Up until 1989 the Department of Labour collected the information and then there was a break in the data series as Statistics NZ began to collect average wage information.



Figure 1: The real minimum wage for adults since 1984 and youth since 1994

Source: Minimum wage levels supplied by the labour market policy group (Department of Labour), consumer price index from the Reserve Bank of NZ.

Note: Nominal adult minimum wages over the period 1984:4 - 2004:2 and nominal youth minimum wages over the period 1994:1 - 2004:2 are deflated by the consumer price index, with a base year of 1999:2.

As Figure 1 indicates there are two periods of large increases in the real adult minimum wage. They are September 1985 to March 1987, and December 1996 to March 2004. There was approximately a 50% increase in the first time period. The real minimum was then allowed to slowly decline during the 1990s until increases in 1997, 2000 and every year since then have reversed this effect and put the real minimum for adults slightly higher than it was in September 1985.

Figure 1 also highlights the importance of investigating the impact of the youth minimum. The leaps the real minimum for youth has taken since it was first introduced in March 1994 equate to an increase of around 52%. Additionally, the group of teenagers aged 18 - 19 year olds have experienced a 91% rise in their real minimum, since they were initially able to receive a minimum as part of the youth group in March 1994.

Data

Unit record data from the Household Labour Force Survey (HLFS) and its supplement, the Income Survey (IS), over the period 1997 to 2004 is used in this study. HLFS is an excellent source for the purpose of this study, in that it is a large sample of 16-32000 households surveyed per quarter¹⁰ since 1986. Since minimum wage incidence is

relatively low, a large sample helps improve the accuracy of analysis conducted here. The IS is an annual supplement run in conjunction with the HLFS every June quarter since 1997 to provide detailed wage information. Such earnings information allows isolation of the groups of workers earning at or below the minimum wage. This study therefore uses the HLFS-IS over the period for which they overlap and are available (June 1997 to June 2004). Access to the micro-data for this time period was provided through the use of a secure data laboratory on Statistics NZ premises, as Statistics NZ is legally required to protect confidential individual and corporate information under Statistics Act 1975.

Table 1 shows the nominal minimum wages for the three age groups of interest for the sample period under study here.

Table 1: Nominal hourly minimum wage changes between 1997 and 2004

Date of change			
	Age groups		
	16-17 years	18-19 years	20 years +
March 1997	4.20	4.20	7.000
March 2000	4.55 (8.3)	4.55 (8.3)	7.550 (7.9)
March 2001	5.40 (18.7)	7.70 (69.2)	7.700 (2.0)
March 2002	6.40 (18.5)	8.00 (3.9)	8.000 (3.9)
March 2003	6.80 (6.3)	8.50 (6.3)	8.500 (6.3)
March 2004	7.20 (5.9)	9.00 (5.6)	9.000 (5.6)

Information supplied by the Labour Market Policy Group, Department of Labour. All figures for nominal hourly wages are gross \$ per hour. The statistics in parenthesis are the percentage change in the nominal hourly wage.

As Table 1 shows, from March 1997, there was no change to the nominal minimum for either youth (16-19 years) or adults (20 years plus) for three years. After which, two reforms to the youth minimum took place: (i) in March 2001, the youth minimum for 16-17 year olds increased from 60 to 70% of the adult minimum and 18-19 year olds (previously receiving the youth minimum) became part of the adult minimum group, (ii) in March 2002, the youth minimum for 16-17 year olds further increased to 80% of the adult minimum wage.

Impacts of minimum wage increases

Based on a regular usual hourly earnings measure derived from the IS, two wage groups are set up to focus on: (i) Individuals earning below current minimum wage ("sub-minimum workers") and (ii) Individuals earning more than or equal to the current minimum wage but less than 10% above that minimum ("minimum wage workers").

This separation of workers was done for all eight years of data from the IS. Figure 2 shows there is a steady decrease in the fraction of all workers classified as subminimum or minimum wage earners over the time period 1997 to 1999 when no increases were made to the nominal minimum. There were also significant increases in the proportions of these groups relative to the sample size for each year, from 2000

onwards. This corresponds to the time period when annual increases were made to the minimum wage for both adults and youth and there was a noticeable upward trend in the relative minimum wage for most workers. By 2004, affected workers, which comprise all workers earning at or below the minimum wage, made up 8.12% of the workers in this sample.

■ Sub-minimum workers (%) ■ Minimum wage workers (%)

Figure 2: Affected wage groups as a percentage of data sample in each year: June 1997 to June 2004

Source: HLFS and IS data. Author's compilation.

At first, it is difficult to understand the increasing fraction of sub-minimum workers over the period 2000 to 2004, because exemptions from the minimum wage in NZ are few and far between, with close to full coverage for minimum wage legislation in this country. Consequently, the level of enforcement of the statutory minimum wage is the next logical question, to check the existence and significance of any illegal uncovered sectors in the labour market. In terms of enforcement, if an employee is receiving a sub-minimum wage they can make a complaint to a Department of Labour Inspector, who are charged with the duty of enforcing the 1983 MWA. Data pertaining to the enforcement of the minimum wage in Pacheco (2007)¹¹ showed a substantially higher average number of minimum wage complaints and investigations per year from 2000 onwards, versus 1998 to 1999. Therefore, if it is assumed that an increased number of enquiries and complaints are due to poorer enforcement of the minimum wage, then this explains the increasing size of the sub-minimum group from 2000 onwards.

To further investigate which types of individuals are earning below minimum wage, the following graph (Figure 3) splits the bulk of the sub-minimum workers into four age categories – 16-17, 18-19, 20-24 and 25-29 year olds.

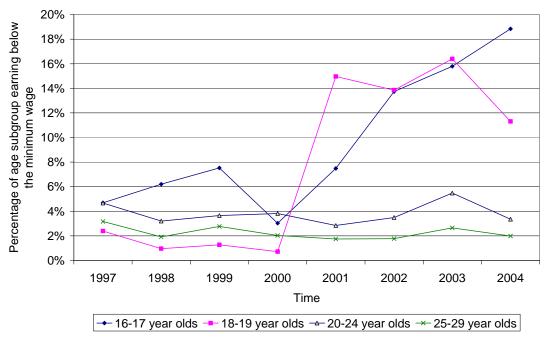


Figure 3: Sub-minimum workers for 16-17, 18-19, 20-24 and 25-29 year olds

Source: HLFS and IS data. Author's compilation.

Figure 3 shows that earning below minimum wage is increasing for 16 to 19 year olds over the time period 1997 to 2004, but remaining steady for 20 to 29 year olds. Specifically, the percentage of 16-17 and 18-19 year olds earning below the minimum wage increased from 4.67% and 2.39% to 18.84% and 11.3% respectively, from 1997 to 2004. This is in comparison to 20-24 and 25-29 year olds, where their comparable percentages actually decreased from 4.67% and 3.17% to 3.35% and 1.99% respectively. These figures obviously assume complete accuracy in the earnings and hours information in the 'cleaned' final sample used in this analysis. However, it is worth noting that similar trends were observed by Hyslop and Stillman (2004) in their analysis of youth over the time period 1997 to 2003. Such a large increase in the numbers of sub-minimum workers in recent years may include employers who are not aware of current minimum wage levels or take longer than three months to adjust wages to the minimum statutory levels (this is because increases are usually legislated in March and the IS is conducted in June) or are aware of the legal minimum but refuse to comply with it.

Card and Krueger (1995) who conducted a similar analysis for the U.S. also found evidence of a sub-minimum group, which was proportionately larger for teenagers. In particular, they found that 7.4% of working teenagers earned less than the prevailing federal minimum wage in 1989. They also found that after two consecutive annual increases in the federal minimum in April 1990 and 1991, by the second quarter of 1991, 17.4% of teens earned less than the prevailing minimum.

Given the rising numbers of workers and consequently proportion of the working age population affected by the minimum wage in NZ, it is necessary to outline its potential impacts. Pacheco (2007) has covered many of these impacts (using the HLFS-IS data) in more detail. In summary, the main findings are that a higher minimum wage:

May affect the number of households living in poverty

The minimum wage is often touted as an anti-poverty tool. Pacheco (2007)¹³ did find a strong link between affected workers being located more heavily in low household income deciles. However, simulations showed that even in a best case scenario, where individuals receiving a higher minimum wage are assumed to suffer no loss in hours worked, the poverty rate for the sample only fell 0.46%. Consequently, questioning the anti-poverty effect of raising the minimum wage.

May affect wage inequality

Several studies in the U.S. (e.g. Card and DiNardo, 2002) find wage inequality being inversely linked to the level of the real minimum wage in the 1980s. Similarly, Pacheco (2007)¹⁴ accepted the hypothesis that large rises in the real minimum wage for teenagers (16-19 year olds) had a significant negative influence on the level of wage dispersion for this group from 2000 onwards.

May affect employment propensity

Pacheco (2007) attempted to isolate the impact of the minimum wage on individuals expected to find the minimum wage binding. In doing this, negative employment effects were generally found for most groups within the overall category of 16 to 29 year olds. 16-17 year olds and Maoris stood out as sub-groups most adversely affected by a higher minimum wage.

May affect educational enrolments

Pacheco and Cruickshank (2007) found for 16-19 year olds that minimum wage rises have a statistically significant negative effect on enrolment levels. This result also helps to explain the link found between higher minimum wage levels and increased labour force participation rates.

May affect shareholder's wealth

This could occur through reduced profit expectations for low wage employers. Pacheco and Naiker (2006) actually found that investors in low wage firms seem to find news of minimum wage rises irrelevant, resulting in an insignificant impact on profit expectations for low wage employers by investors.

Given the myriad of outcomes affected workers may experience when the minimum wage is increased, it is useful to examine who these workers are and how they are changing, given the recent increases in the adult and youth minimum wage in NZ. This is investigated in the following section.

Changes in characteristics of all workers affected by the minimum wage

This section provides analysis of the key demographic, household, educational and industry characteristics of individuals who are affected by the minimum wage. By comparing two time periods of 1997-1999 and 2002-2004, we are able to see what types of individuals are most 'at risk' when the minimum wage increases. These time periods are used because in the first there were no changes to the nominal minimum wage for any age group, whereas in the latter period, two reforms to the youth minimum wage had occurred and yearly increases were being made to the nominal

minimum for both adults and youth. Past research by Card and Krueger (1995) also tabulated wage data against other characteristics of individuals to find which subgroup(s) of workers were more at risk when the minimum wage was raised¹⁵. However, they viewed one time period of just before the April 1990 increase in the minimum wage. This analysis goes one step further and compares two important time periods in NZ's unique situation to show exactly which groups were more affected by a rising minimum. Most importantly, it provides policymakers with a better picture of which groups of individuals are most likely to be impacted when they decide to further increase the minimum wage.

The descriptive statistics provided in the following table (Table 2) is shown for each of the two three year time periods, as averages across the merged data give more consistent and robust results, rather than individual year snapshot estimates.

Table 2: Characteristics of all sub-minimum and minimum wage workers: 1997-1999 and 2002-2004

	(1997-199	9)	(2002-2004)	
	Sub-	Minimu	Sub-	
	minimu	m wage	minimu	Minimu
Characteristics of workers	m	workers	m	m wage
	workers		workers	workers
Total (% of sample)	2.63	1.71	3.07	4.46
Individual characteristics:				
Average age (years)	40.25	38.98	32.08***	31.45***
Percentage aged 16 – 17	1.46	0.68	16.02***	12.00***
Percentage aged 18 – 19	0.57	0.00	14.91***	16.74***
Percentage aged 20 – 24	7.92	12.27	12.16***	17.58***
Percentage aged 25 +	90.04	87.05	56.90***	53.67***
Percentage female	61.97	65.80	59.09***	67.55***
Percentage Maori	21.24	16.50	15.37***	14.01***
Percentage Pacific Islander	7.00	8.67	4.96***	6.65***
Percentage NZ born	84.26	79.70	80.30***	81.36***
Average years in NZ	3.07	3.40	2.45***	1.70***
Education (highest qualification):				
Percentage with no school				
qualifications	43.74	47.18	31.89***	32.86***
Percentage with school certificate	12.96	14.15	22.25***	23.26***
Percentage with Sixth Form or				
refeemage with Sixth Politi of		11 -1	19.16***	20.96***
Bursary	9.01	14.64	19.10	20.70
Č	9.01 28.26	14.64 20.80	21.31***	18.76***
Bursary				

characteristics:

Percentage working full-time	60.40	56.71	44.64***	49.76***
Usual total weekly hours	31.57	29.81	25.78***	26.40***
Usual overtime weekly hours	0.10	0.05	0.13***	0.21***
Hourly wage as a proportion of				
relevant minimum wage	0.74	1.05	0.81***	1.04***
Real average usual hourly wage				
exclusive of overtime (\$)	5.05	7.24	5.97***	7.79***
Real usual weekly overtime earnings				
(\$)	4.23	3.08	4.68	2.71**
Share of household income from				
earnings of main job (%)	29.99	40.32	26.74***	30.33***
Share of household income from				
earnings of all wage and salary jobs				
(%)	30.13	40.47	27.45***	31.11***
Percentage receiving any transfer				
income	32.61	34.03	20.77***	23.10***
Household characteristics:				
Real average weekly household			907.06**	999.35**
income (\$)	751.90	713.14	*	*
Percentage married	60.49	65.07	43.68***	42.54***
Percentage one person households	4.50	4.39	6.87***	4.61
Percentage single-parent households				
with dependents	14.54	12.78	15.51***	16.83***
Percentage two-parent households				
with dependents	48.80	49.31	51.85***	47.26***
Average household size	3.17	3.09	3.44***	3.43***
-				
Industry characteristics:				
Percentage in each earnings				
category working in:				
A ' 1/ E / 1E'1'	12.27	10.60	0.50***	0 60444
Agriculture, Forestry and Fishing	13.27	12.60	9.52***	9.68***
Manufacturing	11.86	18.07	7.24***	11.23***
Construction	4.85	2.36	3.80***	2.77***
Wholesale trade	1.34	1.13	2.26***	2.40***
Retail trade	14.85	25.35	22.36***	29.63***
Accommodation, Cafes and	2.62	.	0. 50 steptests	1 5 00 de de de
Restaurants	3.63	6.98	9.53***	15.00***
Transport and Storage	4.77	2.62	2.84***	1.68***
	4.77	0.00	O A Calculate	1 4 7 de de de
Property and business Services				
Education	7.98	6.61	8.15	4.23***
Health and Community Services	8.47	7.28		
Cultural and Recreational Services	1 (19)	0.51	3.07/***	1.90***
Finance and Insurance and Communication Services Property and business Services	4.76 14.13	0.98 8.12	3.49*** 6.36***	1.47*** 4.28***
± •				
			10.32***	11.03***
Cultural and Recreational Services	1.09	0.51	3.07***	1.90***
Culturul and Recreational Belvices	1.07	0.01	0.07	

Personal and Other Services	6.02	3.25	9.36***	3.40***
Other Services	2.50	4.16	1.55***	0.95***
Sample size	848	550	1179	1713

Source: HLFS and IS data. Author's compilation.

Note: *10%, ** 5%, ***1% significance level difference in characteristics of sub-minimum and minimum wage workers between 1997-1999 and 2002-2004.

Table 2 reveals several interesting trends in characteristics of affected workers, in terms of their demographic, education, hours of work and earnings, household and industry information. To indicate which characteristics changed significantly t-tests were also conducted. This was done to test whether the average characteristics of affected workers were significantly different between 1997-1999 and 2002-2004.

The results of the t-tests for sub-minimum and minimum wage workers show many characteristics changed significantly between the two time periods¹⁶. Specifically, the percentage of minimum wage workers aged 16-17, 18-19, 20-24, all increased significantly at a 1% level. It is very noticeable that barely one-percent of the sub-minimum or the minimum wage workers group (1.46% and 0.68% respectively) were aged 16-17 in the time period 1997-1999, whereas by 2002-2004, 16-17 year olds accounted for 16.02% and 12.00% of these two wage groups. Similarly, large increases in the number of 18-19 and 20-24 year olds as a proportion of the sub-minimum and minimum wage workers group were also witnessed. At the same time, as expected, the proportion of workers over 25 earning the minimum wage significantly decreased (from 87.05% to 53.67%).

There was a small increase in the proportion of minimum wage workers that are female, (significant at the 1% level), and a small fall in the proportion of these workers that are Maori or Pacific Islander (both again significant at the 1% level). The latter result is somewhat unexpected. Given the higher incidence of Maori or Pacific Islanders in general in the minimum wage group over the time period of the sample, relative to their incidence in the full sample of workers, it would be normal to expect these ethnic minorities to be more likely to receive the minimum wage in the second time period of 2002-2004. Since this is not the case, this may be an indication that age, rather than ethnicity, is more important in determining an individual's minimum wage status.

There are six levels of highest educational attainment that are consistent across the sample period. The first being individuals with no school qualifications. Just above this are individuals with a school certificate and then individuals who have either completed sixth form or bursary (the last two years of schooling). The next three levels encompass post-school qualifications, namely a diploma, Bachelor's degree and finally a Master's degree. Table 2 provides evidence of the increased minimum wage in NZ impacting further up the wage distribution in the latter time period due to the change in the educational characteristics of the affected workers. In 2002-2004, both sub-minimum and minimum wage workers were much more likely to have more educational qualifications compared to the affected group in 1997-1999. This is shown by a significant fall in affected workers having no qualifications, and corresponding

increases in the proportion of affected workers with school certificate or with sixth form or bursary as their highest qualification.

The next noteworthy trend is in the Hours of work and Earnings characteristics section in Table 2. The percentage of affected workers working full-time has fallen considerably for both sub-minimum and minimum wage workers. The usual total weekly hours has also fallen between the two time periods, and the decrease is significant at the 1% level. These two findings may be an indication that the recent rises in the minimum wage have reduced the hours for affected workers and forced some into part-time employment. Although, it is also likely that this is not a behavioural effect, but a compositional effect, (i.e. since minimum wage earners are more likely to be teenagers and young adults in the second time period, this may be what results in minimum wage earners being comprised of more part-time workers and having fewer hours of employment).

Minimum wage workers are also contributing less to their household income than before. Previously, their earnings from their main job accounted for close to 40% of the household income, whereas in the time period 2002-2004, it only contributed to 30.33% of the weekly household income. However, this finding is not complemented by significant increases in the percentage of affected workers receiving transfer income. In fact, these figures have decreased significantly, at the 1% level. Therefore, a possible explanation for this may be that in the latter time period, other household members increased their work hours and hence, their contribution to the household income. This may have been motivated by the higher minimum wage levels in the labour market at that time, or also by the considerable economic growth NZ experienced during this time. Again, it may be possible that compositional effects dominate any behavioural effects induced by the higher minimum wage (i.e. since minimum wage earners are more likely to be teenagers in the latter time period, this is possibly what causes the drop in average contribution to household income from minimum wage workers).

The household characteristics of the affected workers have also changed between 1997-1999 and 2002-2004. Firstly, the real average weekly household income has significantly increased. It is impossible to say how much of this rise for households affected by the minimum wage is due to minimum wage increases, and how much can be attributed to the growth in NZ at that time or due to compositional effects of the rising minimum wage. There was also a significant fall in the proportion of minimum wage workers that are married. This corresponds to the significant increases in youth affected by the minimum wage.

Lastly, the industry characteristics of affected workers in Table 2 have also significantly changed. Minimum wage workers are noticeably less likely to work in agriculture, forestry and fishing and manufacturing. They are more likely to work in retail trade and accommodation, cafes and restaurants. Once again, these findings are more than likely due to the increase in youth affected by the minimum wage, i.e. compositional effects¹⁷.

Conclusion

This paper presents a brief look at the rising number of workers affected by the minimum wage in New Zealand. It provides a summary of the ways in which workers receiving at or below the minimum wage may be affected and presents a descriptive analysis of the changing characteristics of minimum and sub-minimum workers in NZ. The descriptive analysis points to two important outcomes. Firstly, the characteristics of minimum wage workers change over time. Given the vast changes exhibited in just an 8 year time span, talking about a 'typical' minimum wage worker is made difficult. Secondly, age appears to be an important factor in determining minimum and sub-minimum wage status. This seems to be more important than other individual characteristics such as belonging to an ethnic minority, educational attainment, household characteristics and also industry characteristics.

References

Alston, R., Kearl, J.R and Vaughn, M.B. (1992). Is There A Consensus Among Economists in the 1990s? *American Economic Review*. 82(2): 203-209.

Anderson, M. and Blandy, R. (1992). What Australian Economics Professors Think. *The Australian Economic Review.* 100, 17-40.

Brown, C., Gilrow, C. and Kohen, A. (1982). The effect of the minimum wage on employment and unemployment. *Journal of Economic Literature*. 20(2): 487-528.

Card, D., Katz, L. and Krueger, A. (1994). Comment on David Neumark and William Wascher. Employment effects of minimum and sub-minimum wages: panel on state minimum wage laws. *Industrial and Labour Relations Review*. 46(3): 487-96.

Card, D. and DiNardo, J. (2002). Skill-Biased Technological Change and Rising Wage Inequality: Some Problems and Puzzles. *Journal of Labour Economics*. 20(4): 733-83.

Card, D. and Krueger, A.B. (1994). Minimum wages and employment: a case study of the fast-food industry in New Jersey and Pennsylvania. *American Economic Review*. 84(4): 772-93.

Card, D. and Krueger, A.B. (1995). *Myth and measurement: the new economics of the minimum wage*. Princeton, New Jersey: Princeton University Press.

Chapple, S. (1997). Do minimum wages have an adverse impact on employment? Evidence from New Zealand. *Journal of Labour Market Research*. 2: 25-50.

Coleman, W. (1992). Concord and Discord Amongst New Zealand Economists: the Results of an Opinion Survey. *New Zealand Economic Papers*. 26(1): 47-82.

Contract. (1994). The report on current industrial relations in New Zealand. Vol. 9. Department of Labour.

Deere, D., Murphy, K.M., and Welch, F. (1995). Reexamining methods of estimating minimum-wage effects: employment and the 1990-1991 minimum-wage hike. *American Economic Review Papers and Proceedings*. 85(2): 232-37.

Department of Labour. 2006. Retrieved March 15, 2006 from the World Wide Web: http://www.ers.govt.nz/pay/disabled.html.

Hyslop, D. and Stillman, S. (2004). *Youth minimum wage reform and the labour market*. Working Paper 04/03. The New Zealand Treasury: Wellington.

Katz, L., and Krueger, A.B. (1992). The effect of the minimum wage on the fast-food industry. *Industrial and Labour Relations Review*. 46: 6-21.

Kim, T. and Taylor, L. (1995). The employment effect in retail trade of California's 1988 minimum wage increase. *Journal of Business and Economic Statistics*. 13: 175-182.

Maloney, T. (1995). Does the adult minimum wage affect employment and unemployment in New Zealand? *New Zealand Economic Papers*. 29(1): 1-19.

Maloney, T. (1997). The 'new economics' of the minimum wage? Evidence from New Zealand. *Agenda*. 4(2): 185-96.

Neumark, D. and Wascher, W. (1992). Employment effects of minimum and subminimum wages: panel data on state minimum wage laws. *Industrial and Labour Relations Review*. 46(1): 55-81.

Neumark, D. and Wascher, W. (1995). The effect of New Jersey's minimum wage increase on fast-food employment: a re-evaluation using payroll records. *NBER Working Paper*. No. W5224.

Neumark, D. and Wascher, W. (2006). Minimum Wages and Employment: A Review of Evidence from the New Minimum Wage Research. *NBER Working Paper*. No. 12663

Pacheco, G. (2007). Minimum Wage in New Zealand: An Empirical Enquiry. *Doctoral Dissertation. University of Auckland*.

Pacheco, G. and Maloney, T. (1999). Does the minimum wage reduce the employment prospects of unqualified New Zealand women? *Journal of Labour Market Research*. 4: 51-69.

Pacheco, G. and Cruickshank, A. (2007). Minimum wage effects on educational enrollments in New Zealand. *Economics of Education Review*, 26(5): 574-587.

Pacheco, G. and Naiker, V. (2006). Impact of the Minimum Wage on Expected Profits. *International Review of Applied Economics*, 20(4): 469-90.

Statistics NZ (2007) Retrieved August 1, 2007 from the World Wide Web: http://www2.stats.govt.nz/domino/external/omni/omni.nsf/outputs/new+zealand+income+survey.

Wellington, A.J. (1991). Effects of the minimum wage on the employment status of youths: an update. *Journal of Human Resources*. 26(1): 27-46.

Notes

¹ This estimate is based on data from a National Longitudinal Survey of Youth. Specifically, Card and Krueger (1995) tracked a 1964-birth cohort between 1979 and 1991 to estimate the percentage of workers who were ever paid within five cents of the federal minimum

² There is no further detail on what 'provisions' Australian Economic Professors considered when answering this survey question

³ See Neumark and Wascher (2006) for a review of this recent research on minimum wages and employment.

⁴ See also the UK low pay commission for recent deliberations on the effects of the minimum wage.

⁵ See Maloney (1995 and 1997), Chapple (1997), Pacheco and Maloney (1999) and Hyslop and Stillman (2004). A review of all these studies (summarising findings and indicating potential issues) is provided in Chapter 4 of Pacheco (2007).

 $^{^6}$ Relative minimum wage = minimum wage for workers aged 20 or over / median wage for fulltime employees aged 20 or over.

⁷ Contract is 'The Report on Current Industrial Relations in New Zealand' produced by the Department of Labour.

⁸ An under rate permit lets a person work for less than the minimum wage. It is granted by Labour Inspectors to a person with a recognised disability that significantly slows down their work and who is incapable of earning the minimum wage (Department of Labour, 2006).

⁹ Source: Historical inflation rates from the Reserve Bank of New Zealand (See www.rbnz.govt.nz).

¹⁰ The HLFS sample frame uses a rotating panel for every eight quarters (i.e. one eighth of households are rotated out each quarter). For a detailed explanation of the selection of a household in the sampling frame see Statistics NZ (2007).

¹¹ See Chapter 2 of this reference for further details on minimum wage enquiries, complaints and investigations over the period 1997 to 2004.

¹² The HLFS-IS data was cleaned to remove outliers, individuals with missing information and possible cases of measurement error.

¹³ See Chapter 6 of this reference for further details.

¹⁴ See Chapter 7 of this reference for further details

¹⁵ Specifically, the 1990 increase in the U.S. federal minimum.

¹⁶ Note that other factors besides the level of the minimum wage have changed between these two time periods, such as increasing educational attainment of the workforce, changing composition of employment between industries, etc. These factors may also explain changes in the composition of minimum wage workers that are observed.

¹⁷ For example, sectoral shifts in the labour market over the time period under study in NZ have resulted in the agriculture, forestry and fishing industry employing a lower proportion of the working age population and the retail trade and accommodation, cafes and restaurants sector employing a higher proportion. Consequently, this then makes it understandable why more youth would be employed in the latter industry.

Pay Equity and Equal Employment Opportunity: Development Between 2004 – 2007 and Evaluation

PRUE HYMAN*

Abstract

My 2004 LEW paper (Hyman, 2006) argued that given the plethora of studies and reports in this area in New Zealand and overseas, the most urgent priority was practical development and piloting of means of implementation of pay and employment equity. There are positive developments, including the establishment and work of the Pay and Employment Equity Unit within the Department of Labour. However, progress is inevitably slow even in the public sector, and many indicators, such as the low representation of women in areas varying from the modern apprenticeship scheme to Directorships of Stock Exchange listed companies show how far there is to go. Meanwhile carers and cleaners, where Maori and Pacific women predominate, still fight for a living wage. This paper examines and evaluates developments during 2004-2007.

Introduction

This paper examines and evaluates developments in pay equity and equal employment opportunity in the last two years. It focuses mainly on gender issues but also touches on other dimensions of equal employment opportunity (EEO), including age, disability and ethnicity. The case for eliminating discrimination in employment is based on these and other personal characteristics and has now been enshrined in legislation for many years, and is generally accepted as desirable on both equity and efficiency grounds. However, the criteria for what constitutes discrimination, and in particular equity, equality, equal employment opportunity, and pay equity, are more contestable and any increased regulation in these areas tends to be opposed by employers as too interventionist and costly. These issues are discussed briefly below (and for more detailed discussion, see Hyman, 1994). However, the position of this paper is that attempts to enhance the position of less advantaged groups in the labour market on both equity and efficiency grounds are desirable.

The Pay and Employment Equity Unit

The establishment of the Pay and Employment Equity Unit in the Department of Labour (DoL), in accordance with recommendations from the 2004 Taskforce on Pay & Employment Equity in the Public Service, Public Education and Public Health, has been an important development. However, its work covers only about 10% of the labour force and any flow on to the private sector is likely to be slow. The Unit's initial work covers development of tools and guidelines, together with training for:

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- (i) pay and employment equity reviews (to be followed by response plans);
- (ii) job investigations;
- (iii) pay evaluation.

Pay and Employment Equity Reviews

The Unit assisted with two pilot reviews in 2005, at the National Library and the Auckland University of Technology, and has developed a Review Workbook (New Zealand Department of Labour, 2006). It also provides training on the tools and processes for review committees and project managers and is developing case studies to assist participants. The report on the pilot concluded that the review tool was robust and full reviews have followed. Seven public service organisations started their reviews within the eight months to August 2006, further thirteen were in active preparation, and some are now completed. The Director of the Unit commented that

"... the core of the approach adopted is that sustainable change depends on active engagement in partnerships of employers, employees and unions in workplaces in identifying equity issues and agreeing on response plans to address them" (Hall, 2006).

The Unit's factsheet 2 states that a pay review "assists organisations to find out if:

- women and men have an equitable share of rewards
- women and men participate equitably in all areas of organisations
- women and men are treated with respect and fairness". (www.dol.govt.nz/services/PayAndEmploymentEquity/factsheets/fs2-plan.asps)

The workbook will assist review committees in gathering evidence on the impact and results of organisational policies and practices. These need to be equitable for women and men, but not necessarily the same. While the focus of the review is on gender, the process can also be used to consider other characteristics, such as ethnicity, age or disability. The final step is developing a response plan to address the employment and pay equity issues identified as priorities.

In explaining the equality/equity concepts, the workbook states:

"The distinction between equality and equity is important to bear in mind. While equality refers to being equal or the same, equity refers to being just, fair or impartial. In the employment equity context, equity refers to proportionality between differences in relevant characteristics of people and jobs and how they are treated" (New Zealand Department of Labour, 2006: 10).

Further, "... any gender difference in the distribution of organisational rewards, participation levels and experience of respect and fairness should be explainable and justifiable" New Zealand Department of Labour, 2006: 10). But this is quickly followed by the equal pay definition of the 1960 Public Sector Equal Pay Act (similar to that in the 1972 Act covering the private sector) which has been interpreted in the

courts as requiring equal pay for only identical or highly similar work, *not* work of equal value.

The theoretical and practical meaning of most of this terminology is highly contestable. Equality and equity, proportionality with respect to differences in characteristics and resulting treatment, and what constitutes explainable and even more so justifiable differences in treatment are the stuff of argument, not a science. The proof of the pudding will be in the eating. It is too early to assess results, and whether they will challenge the historical undervaluation of female dominated work is an open question. The review may be better able to deal with clear EEO matters than with equal value issues.

Pay Investigations and Remedial Pay Settlements

Pay investigations may be conducted using the gender-neutral job evaluation tool. They are intended to provide a systematic and rigorous process for evaluating jobs in setting remuneration and may be recommended in a review response plan or initiated by employers or through bargaining. They will focus on factors affecting job size, including skills, knowledge and qualifications, as well as conditions, and also cover other factors affecting remuneration, including market influences, performance payments, and other employment conditions.

If, in spite of the issues discussed above, systemic undervaluation of female dominated work is revealed by pay reviews and/or pay investigations, a key issue is how this would be remedied and financed. Here the role of government as employer, directly or indirectly as funder through contracts, becomes crucial and nervousness over cost can be detected. Factsheet 2 states that:

"... the employer(s) and union(s) can negotiate the solutions through collective bargaining... The Government has decided that claims for additional funding for remedial pay settlements arising from pay and employment equity reviews will be considered within existing Budget processes, advised by a tripartite process. Claims need to be supported by a business case establishing clear evidence that there is pay inequity (preferably based on a rigorous pay investigation), whether organisations can fund the claim through reprioritisation and how relativities based claims will be managed."

Government is clearly concerned with the possibility of extra public sector expenditure. A remedial settlement 'preferably' requires a pay investigation not just a review (and so is confined to 70% or more female work), and the section provides warnings and incentives to strengthen employer resistance. Strong union expertise and commitment, matched by that of the relevant groups of employees, will be necessary if evidence is to be converted to action and a real remedy. No organisation has yet reached that stage. The bipartite approach seen as essential by the Unit is dependent not only on union expertise but also on the commitment of organisations to union involvement, which will almost inevitably be variable.

A useful case study is that of librarians. Mary-Jane Gleeson, an Australian expert on pay and employment equity with experience in its applications to librarianship, visited

New Zealand in 2005 to assist the Unit and participants in pilot and subsequent reviews. She was earlier involved in the New South Wales Library case which resulted in a 16% average pay increase for public sector librarians, a heavily female job category in both countries. This arose from re-assessment and documentation of the skills being applied in different jobs. Observing that women tend to use plain English language which undervalues their work, she noted that this had led to oversimplification of complex skills involved in librarian jobs.

The National Library pilot audit report, signed by management and union representatives, stated that it was intended to develop a comprehensive picture of the Library's gender profile and to focus attention and resources on areas with the most impact in bringing about pay and employment equity for women. It found a gender earnings gap of 11%, but noted particularly that Librarians, a female dominated group, earned 24% less than Digital Innovation Technology Services staff, the only male dominated occupational group in the workplace, despite equivalent Job Evaluation points. It also concluded that the current Job Evaluation system was outdated, not accurately measuring all current functions, reinforced by inadequate role descriptions. Hence, it argued the need for a sector wide occupational audit, with the undervaluing of librarian occupations tested and found to have substance. A concern expressed was that that the audit did not have the capacity to address the issue of pay and employment equity for librarians as an occupational group. Hence the Library's ability to influence gender equity for librarians would continue to be constrained. This reinforces the issues raised above.

Job Evaluation

The Gender Neutral Job Evaluation tool is of course not the first attempt at such an exercise in New Zealand. The Equity at Work job evaluation scheme (Burns and Coleman, 1991) was developed under the auspices of the Employment Equity Commission and completed after its abolition. That Commission was established under the Employment Equity Act passed and repealed in 1990. A generic scheme, it was designed to be gender neutral and adaptable to specific needs. The new scheme (to be renamed Equitable Job Evaluation) has been developed and tested in conjunction with Mercer and Top Drawer consultancies. National's Industrial Relations spokesman Wayne Mapp labelled the payment of \$121,000 to these two firms for work on the scheme "a wasteful and irresponsible use of taxpayers' money", (Dominion Post, 26 June, 2006), and argued that the PEEU should have done the work itself. Department of Labour Chief Executive James Buwalda defended the expenditure on the basis of the small size of the unit and the need to draw on expertise in particular areas, given the concern to eliminate gender bias, an emphasis not common in job evaluation. The criticism of such a small expenditure by comparison with high consultancy fees paid by all governments in a wide range of areas might be seen as provocative and perhaps inspired by the gender emphasis of the work.

The scheme is at its final stage of development after undergoing three tests. The final test on jobs at the Ministry of Social Development is comparing the rank order with that produced by existing systems. The factor plan and guide (including questionnaire and evaluation record) are being prepared for publication, while an education and training kit is being jointly developed with the New Zealand Council of Trade Unions and the State Services Commission.

Another initiative under way on job evaluation is development of a Gender Inclusive Job Evaluation Standard, to assist in identifying and addressing gender bias. Standards New Zealand released a draft for public comment and is currently considering the submissions. The process has involved input from business, unions, job evaluation providers, the Human Resources Institute of New Zealand and gender equity experts. Given extensive critiques of most standard job evaluation systems for containing gender biases (for example Burton, 1988, Hyman, 1988) this Standard is needed. It has the potential for the work of the Unit to extend beyond the 10% of the workforce covered by its core responsibilities.

Contestable Fund

This fund makes grants to organisations involved in implementing the Action Plan. It was oversubscribed in the 2006 funding round, with twenty applicants applying for a total of \$2.9m but only \$1m was available. Among the criteria used were partial not full reimbursement, value for money and substantial expected gains toward implementing pay and employment equity, and funding only for new work on the review process. Successful applicants included ten government departments as well as public health organisations (five District Health Boards involved in reviews). With such a high proportion of funding going to government departments to appoint project managers for the audit process, it seems appropriate to ask whether a commitment to equity would indicate that such staff should be paid from core departmental funding. Union participation in the reviews also received funding. The New Zealand Nurses Organisation is engaging members, delegates and staff at all levels in the Plan of Action. The Public Service Association has appointed a pay and employment equity advisor and its funding will help build capacity in the area for all three sectors.

Independent of the Taskforce report and subsequent work of the Unit, some trade unions have continued to use equal value arguments in their pay claims. While there is no legislation requiring anything stronger than equal pay for equal (effectively identical) work, such claims in collective bargaining have had some success. The pay settlement for public hospital registered nurses in 2005, in which equal value arguments were a strong part of the union case, has been the most important example of this type. However, it has not been comprehensively passed on to other workplaces employing such nurses, many of which are therefore experiencing staff shortages and dissatisfaction. And related female dominated caring work requiring lower qualifications, but where the skills involved are still clearly undervalued, is a major problem area (Burns et al, 1999).

Equal Employment Opportunity – Public Sector

The State Sector Act, 1988, requires Public Service CEOs to operate as 'good employers' which inter alia involves a proactive Equal Employment Opportunities programme, covering at a minimum: Maori; women; ethnic minority groups; and persons with disabilities. However, the Taskforce considered that "stronger mechanisms are required to ensure that the issues are not only identified, but also acted upon" (Taskforce, 2004: 74) which the process discussed above is intended to fulfil, at least with respect to gender. In the meantime, the State Services Commission

publishes an annual EEO Progress Report for the Public Service, which tends to be thorough on statistics but cautious with respect to analysis and recommendations. The 2005 report, reviewing progress from 2000 to 2004, referred to positive trends including increased representation of Pacific peoples and Asians in the Public Service, increased representation of all the EEO groups in the managerial occupation group, and improved representation of women in senior management. It also correctly noted areas of concern, including pay gaps and low representation in senior management for several of the EEO groups. There was little change to the pay gap between female and male public servants (State Services Commission, 2005).

Universities are an interesting case study, since they strongly defend their commitment in theory and practice to merit criteria for appointments and promotion, and since most had EEO programmes and policies at an early stage. However, senior academic staff are still highly male dominated, with only 16.9% of Associate Professors and Professors being women in 2005, up marginally from 15.8% in 2003 (Human Rights Commission and New Zealand Centre for Women & Leadership, 2006). The lowest proportion is 6.3% at Canterbury University, where a case was taken in 2004 to the Human Rights Commission by Sue Newberry over her nonpromotion to Associate Professor. Canterbury's response defended the university's promotion procedures and argued that there was no sex discrimination involved in this case or in general. Sue Newberry has been lost to New Zealand, having obtained her Associate Professor position at Sydney University. The HRC Director of Proceedings had advised her of the potential difficulties in proving the alleged discrimination. While she could point to a series of disingenuous and illogical events, it was much more difficult to show that the primary operating factor was gender discrimination. As so often, the standard of proof required makes establishing gender discrimination, direct or indirect, very difficult.

Nevertheless, after 30 years or more of documentation of the issues, suspicion of subtle gender bias remains strong. A 2004 report on gender and academic promotions at Massey, surveying 619 staff members, showed that perceptions of barriers to promotion and lack of feedback on failure still remained more common among women. Massey academic women were five times more likely than men to believe that having time away from the workforce is a barrier to promotion, and three times as likely to mention the lack of affordable childcare. Women were only half as likely as men to feel they had reached the academic level to which they aspired. More women than men identified barriers to promotion such as high teaching loads and a lack of time for research (Doyle et al, 2004). Canterbury's Pro Vice Chancellor acknowledged in response to the report that there might be at all our universities a lack of parity with regard to gender that can be extremely subtle.

Equal Employment Opportunity – Private Sector

In the private sector there are many indicators showing that there is a long way to go to achieve gender equality. The Modern Apprenticeship scheme is mainly a male domain with the female proportion having increased only from 6.6% in 2003 to 8.5% in March 2006. Women were over one third of participants in tourism, public sector, retail, hospitality and seafood, but a miniscule proportion in the male traditional areas (10 out of 1430 in engineering and 6 out of 1315 in building and construction, the two

largest groups overall). Clearly thirty years of work to encourage women into these trades has had little impact. To increase female participation, the scheme has incorporated industries that are more traditionally 'female' – such as retail – but which still tend to be lower-paid and with less developed career paths than the traditionally 'male' skilled trades. The EEO Commissioner Judy McGregor warns that this approach to gender-balancing the scheme reinforces stereotypes, and will not see more women in high-skill, high-paid technical jobs, perpetuating occupational segregation.

At the other end of the spectrum is the underrepresentation of women in private sector boardrooms. The top 100 firms on the New Zealand Stock Exchange still had only 7% women directors in 2006, up from 5% in 2003. (Human Rights Commission and New Zealand Centre for Women & Leadership, 2006).

The only legislative underpinnings for EEO in the private sector are the anti discrimination provisions of industrial relations and human rights law. Despite the difficulties outlined above in establishing discrimination on specific grounds (gender, ethnicity, age etc) to the standard of proof required, there has been one recent success in the Talley case. Caitlin Lewis claimed that Talley's discriminated against women by not giving them a chance to do higher-paid work and this was upheld by the Human Rights Review Tribunal. Talley's hiring process was described by the Office of Human Rights Proceedings as 'a drafting gate', with men automatically steered into higher-paid fish filleting jobs and women into lower-paid trimming jobs. Its Director, Robert Hesketh, said that the case "establishes quite clearly that [Talley's] was practising sex-discrimination in the way it allocated its roles and that the decision

"... is going to require larger employers with a varying workforce and varying tasks, to audit what they do and make sure that any divisions along sex lines are for sound reasons, not for historical reasons that aren't relevant. One of the reasons that Talley's gave for preferring men in the [higher paid] filleting role was that it involved lifting heavy containers of fish. The lie that you can put to that, was that the woman plaintiff in the Talley's case was a six-foot, strongly built woman who would have had no difficulty whatsoever, as she put it, 'huffing' bins of fish". (National Equal Opportunities Network, 2007).

Good EEO information and resources are available on the web, with the development by the Human Rights Commission and the Equal Employment Opportunities Trust of the National Equal Opportunities Network (NEON) site quoted above. NEON's resources include profiles of EEO groups, information about EEO issues, advice for Crown entities on being a 'good employer', national and overseas news, and research and case studies, as well as links to others working in EEO. The Trust's own site is also a useful resource (www.eeotrust.org.nz/).

Various minimum code provisions, such as the minimum wage and parental leave, together with some government programmes, such as provision and subsidies for child care, as well as policies, for example on breastfeeding in the workplace, also have EEO impacts. Those which particularly affect parents with dependent children have major gender impacts in practice, since women continue to take the major role in family related responsibilities. Hence the extension of paid parental leave to 14 weeks and the inclusion of self employed parents are positive developments, although

further improvements to eligibility, particularly for casual and seasonal workers, and to the length of leave and level of payment are desirable. On breastfeeding, the Human Rights Commission has recommended the provision of a legal framework for the right to breastfeed at work but this has not been taken up.

Age, Disability and Ethnicity

Age discrimination (against both the youngest and oldest in the labour force) is another issue rightly receiving increasing attention. There is a substantial irony with respect to the position of older workers. On the one hand, labour force participation among this group has been increasing quite rapidly, pulled by greater longevity, improved average health levels, and the wish by some, including women who have had periods out of the labour force, to remain in paid work longer for financial and other reasons. It has also been pushed by the increase to 65 for eligibility for New Zealand Superannuation and by fears that this may rise further with population ageing and concern over the rising proportion of the government budget taken by NZS. Yet, despite human rights legislation making discrimination on the basis of age unlawful, there is evidence of substantial prejudice against older workers by employers. Clearly higher employment levels are good for the economy, given labour shortages. We need to use all our human capital, particularly the experience and skills among this group.

The EEO Trust's Work and Age Survey explored what 6,484 respondents want from work as they get older and what would encourage them to continue to contribute their skills and experience at work. For most working people, the ideal transition from full-time work to retirement would involve part-time work or more flexible working hours. About one in three respondents said they had experienced discrimination at work due to their age (EEO Trust, 2006). A recent study of barriers to entry for the older worker used a field experiment (written applications and resumes to apply for 75 advertised positions), a short listing simulation, and interviews with employers and recruiters. "Younger workers were seen as more suitable and were significantly more likely to be short-listed...[For example]...for low demand (HR administrative) positions, the resume of a 25+ year old worker was six to twelve times as likely to be short-listed as the equivalent resume of a 55+ worker" (Wilson and Kan, 2006: 2).

An EEO Trust on-line survey of disability and employment with 368 responses highlighted the achievements, commitment and talents of disabled people. Despite high awareness of their strengths and skills, many respondents had found it hard to get a job and had come up against barriers that prevented them from making the contribution they were capable of at work (EEO Trust, 2005).

On ethnicity, statistical indicators show ongoing disadvantage in the labour market for Maori and Pacific people. A recent study of the settlement experiences of immigrants and refugees in New Zealand documents a growing literature in the area, in which "regrettably, the experience of discrimination, exclusion and prejudice figures prominently" (Butcher, Spoonley and Trlin, 2006, p.v). In focus group discussions, "... participants noted that the discrimination they experienced was subtle, rather than overt and explicit", (ibid, p.v.) but nevertheless strong. Employment was a major focus with repercussions in other areas. Significant issues in acquiring employment and on the job included: "... the recognition of overseas qualifications; the

desirability of New Zealand qualifications and work experience; application procedures; the sense of being an outsider; and language and accent," (ibid, p.vi).

Flexibility in employment is an important issue not only for older workers, but also for other groups, especially those with significant family responsibilities. Creating family friendly workplaces and assisting individuals to secure a satisfactory work life balance is now a common mantra, although there has probably been more talk than action. The latest substantive move is the introduction of the Employment Relations (Flexible Working Arrangements) Amendment Act 2007. This Act further enshrines the legal precedent on employers' duty to accommodate reasonable requests for flexible working arrangements. It is based on similar 2003 UK legislation under which many applications have been made and around 90% of them agreed to by employers. While tenor of the legislation is more about requesting rather than imposing major obligations, the change in climate could make a real difference.

Other Legislative and Policy Initiatives with Potential Impacts on Pay and Employment Equity – Low Paid Work and Union Action

Realism dictates acknowledgement of the problems of achieving satisfactory outcomes from specific gender and ethnic anti-discrimination and equality policies, as discussed above, despite their symbolic importance. In most circumstances, the general economic and employment relations environment and legislation have greater impact on pay and employment equity than more direct approaches. The level of the minimum wage thus has an important role in protecting lower waged workers, particularly when collective bargaining is weak. The CTU estimates that of the 91,000 workers for whom the latest minimum wage boost directly led to a pay rise, 61,000 were women. The relativity of minimum to average wages has fluctuated widely over the years in New Zealand with extremes of 83% initially (in 1947) and 30% in 1984 (Hyman, 2004). Minimum wage rates have been raised more since 1999 under Labour-led governments than in previous years but by 2006 had only partially restored relativities to a rate of about 50% of the average wage, with the hourly minimum wage rate raised to \$10.25 and the youth rate for 16-17 year olds maintained at 80% of the adult rate or \$8.20 per hour.

However, in 2007, the private member's bill, Minimum Wage (New Entrants) Amendment Bill, was introduced and comes into effect on 1st April, 2008. It replaces the youth minimum wage rate, which is currently \$9.00 per hour, with a new entrant's minimum wage. The actual rate for the new entrant's minimum wage will depend on the outcome of the minimum wage review that government is currently undertaking. Those 16 and 17 year olds who work fulltime will now be able to reach the adult minimum wage within 5 weeks, while those who work part time while pursuing their education will receive the adult minimum wage after three months. This means that many 16 and 17 year old workers will have already completed their qualifying time when the Bill comes into effect, and will be able to move immediately to the adult minimum wage rate, which will be increased to \$11.25 per hour on 1st April 2008 – an increase of a dollar per hour (NZ Government Press Release, 6th September, 2007).

Unions have also been campaigning for a higher minimum wage, and for the abolition of the lower youth wage. In addition, unions have been seeking general wage increases and improvements in specific industries, especially the lowest paid areas. Strike action has been used more than in recent years in both professional (eg junior doctors) and blue collar areas. The CTU is calling for the statutory minimum wage to be set at two thirds of the average wage, and then indexed at this level. They have called for an immediate increase to \$12.00 per hour, rather postponing the lesser increase of \$11.25 to 2008. In addition, a Workers Charter launched in 2005 has a list of ten demands aimed at guaranteeing workers' rights is a resource for the campaigns, while its associated monthly newspaper launched in February 2006, has called for a minimum wage as high as \$15 per hour. With average hourly earnings in June 2006 about \$20, the \$12 target would mean a 60% relativity, while a 2/3 ratio would require \$13.33 per hour.

The tight labour market is among the reasons why workers and unions are able to reassert some muscle after a comparatively quiet period. While some recent campaigns are detailed below, it is noticeable that the latest Victoria University of Wellington's survey of union membership shows that union density remains stagnant in the year to December 2006, despite total union membership reaching its highest level since 1994. Thus, there are still concerns associated with low paid work in private sector service organisations.

The campaigns for general wage increases and improvements in low paid industries include the Fair Share campaign, launched in 2005 to fight for a general 5% wage increase, Supersizemypay.com, and campaigns in cleaning, aged care, fast food and retail. The campaigns gained momentum with strong support among and for supermarket warehouse employees locked out by Progressive Enterprises, owned by Australian retailing giant Woolworths when seeking national pay parity. The eventual three-year settlement achieved the union aim of equal pay across Auckland, Palmerston North, and Christchurch distribution centres. While not achieving one national agreement, the three documents were based on national bargaining. The unions hailed a victory, claiming major public support and strong solidarity.

The Clean Start – Fair Deal for Cleaners campaign of the Service and Food Workers' Union (SFWU) has called on the government to look closely at the inequalities suffered by Pacific Island and Maori workers employed as cleaners in Auckland and Wellington CBD office blocks. The Fair Share for Aged Care campaign of the New Zealand Nurses Organisation and SFWU aims for increased government funding for the sector, targeted to fair pay for the predominantly female caregivers, nurses and support workers, safe staffing levels, better training opportunities, and recognition of training in improved pay. Noting that profits have soared for Aged Care operators, now almost all controlled by multi-national corporations, unions and employees are concerned with what they see as the employers' consistent refusal to pass-on a fair share of huge annual profits. The work of caregivers is intensified with greater elderly dependence - but wages have scarcely increased for many years with \$12 per hour common in this female undervalued occupation.

Another union campaign focused on defeating the Employment Relations (Probationary Employment) Amendment Bill which would introduce a 90-day

probation period for new employees. Its purpose was stated to be to enable employers to take a chance with new employees, without facing the risk of expensive and protracted personal grievance procedures. This Bill couldn't secure sufficient parliamentary support and was withdrawn in 2007. Its intent is likely to resurface, however, if the National Party is in government after the 2008 General Election and this could mean that there would be no right of appeal against an unfair dismissal in the first 90 days of an employment agreement.

Conclusion

In a world economy where dominant transnational corporations can locate and outsource in pursuit of minimum employment costs, it is hardly surprising that New Zealand governments and business place emphasis on labour market flexibility, minimising compliance costs, and avoiding new legislative regulations. In this environment, any stated commitment to gender and ethnic equality is likely to have little teeth. Achievements by women are often portrayed as being at the expense of men and special provisions to lift the position of Maori and other ethnic groups or women are regarded with suspicion. Reductions in gender and ethnic inequality in educational and other human capital acquisition have nevertheless occurred and will continue given social change, pressure from the groups previously denied equal access, and the economic imperatives to use all our labour resources fully. However, some groups are slow to benefit. Equal opportunity is therefore far from a reality, while the undervaluation of many types of female dominated work can only be remedied by requiring systematic processes throughout the labour market. Research and monitoring remains essential.

Continued monitoring is essential if legislative and policy commitments are to be honoured and improved and to avoid any erosion of past gains on the basis that all that is necessary has already been done. It is to be hoped that confidentiality does not prevent the experience of organisations undertaking public sector, health and education pay reviews or using equitable job evaluation being built on — wide dissemination of the planned case studies and research on the efficacy and possible use elsewhere of the review process is highly desirable.

References

Burns, J. and Coleman, M. (1991). *Equity at work – an approach to gender neutral job evaluation*. Wellington: State Services Commission and Department of Labour.

Burns, J., Dwyer, M., Lambie, H. and Lynch, J. (1999). *Homecare workers: A case study of a female occupation*. Wellington: Ministry of Women's Affairs.

Burton, C. (1998). *Redefining merit*. Canberra: Affirmative Action Agency Commonwealth of Australia. Monograph, No.2

Butcher, A. Spoonley, P. and Trlin, A. (2006). *Being accepted: The experience of discrimination and social exclusion by immigrants and refugees in New Zealand*. Palmerston North: New Settlers Programme. Massey University. Occasional Publication, No.13.

Dominion Post (2006), "Job scheme `a success' — but no one's keeping count" by Anna Chalmers, 26 June.

Doyle, A., Wylie, C. and Hodgen, E. with Else, A. (2004). *Gender and academic promotion: A case study of Massey University*. Wellington: New Zealand Council for Educational Research.

EEO Trust. (2005). Disability and Employment – Online survey analysis. Auckland

EEO Trust. (2006). Work and Age Survey Report. Auckland

Hall, P. (2006). *New Zealand's Proactive Pay and Employment Equity Plan of Action*. Paper to International Association for Feminist Economics Conference, Sydney.

Humans Rights Commission and New Zealand Centre for Women and Leadership, Massey University. (2006). New Zealand Census of Women's Participation

Hyman, P. (1998). Equal pay for work of equal value – job evaluation issues. *New Zealand Journal of Industrial Relations*. 13(3): 237-255

Hyman, P. (1994). *Women and Economics: A New Zealand feminist perspective*. Wellington: Bridget Williams Books

Hyman, P. (2004). Significant increases in the minimum wage: A strategy for gender pay equity? *Women's Studies Journal*. 18(2): 11-24

Hyman, P. (2006). Pay equity and equal employment opportunity: Policy, rhetoric and reality in the 2004 New Zealand Labour Market. In *Proceedings of Eleventh Conference on Labour, Employment and Work*. eds. S.B Blumenfeld and G. Lafferty. 283-288. Wellington: Victoria University of Wellington.

National Equal Opportunities Network (2007) retrieved from www.neon.org.nz.

New Zealand Department of Labour. (2006). Working towards Pay and Employment Equity for Women in Public Health, Public Education and Public Service. Wellington.

NZ Government Press Release, (2007) Questions for Oral Answer - 6 September 2007

Thursday, Office of the Clerk, Volume 641, Week 54: 11645, Wellington

State Services Commission. (2005). *EEO Progress in the Public Sector* 2000 – 2004: *The Data Stories*. Wellington.

Taskforce on Pay and Employment Equity. (2004). Report on Pay and Employment Equity in the Public Service and Public Health and Public Education Sectors. Wellington.

Wilson, M. and Kan, J. (2006). *Barriers to entry for the older worker*. Auckland: University of Auckland Business School.

Unions and Union Membership in New Zealand: Annual Review for 2006

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Introduction

This paper continues the series of annual surveys by the Industrial Relations Centre (IRC) on trade union membership in New Zealand, which began in 1991 when the Employment Contracts Act (ECA) ended the practice of union registration and the collection of union data. Although the Department of Labour began collecting official union data again in 2002, the IRC has continued to survey union membership under the Employment Relations Act 2000 (ERA). This year we report on changes in union membership, composition, and density from December 2005 to December 2006.

Some of the more significant findings for the period are:

- A modest increase in overall union membership of 5,190 (just under 1.4%). This indicates a significant slowing in membership growth, which in 2005 increased by 6.6% (23,290 members), and which had grown by 25% since 1999.
- A slight decline in union density, from the 2005 figure of 21.9% down to 21.7% in 2006, within the context of an increase of 2.6% in the overall number of wage and salary earners, from 1,719,500 to 1,764,500.
- An increase in private sector union membership of 4,945 members (2.8%), with a loss in public sector membership of 4,538 members (2.3%), although the public sector remains much more highly unionised.
- A substantial increase in membership 24% (3,520 members) in retail, wholesale, restaurants and hotels, reversing the trend of recent years, although union density in the area remains low (4.5%). On the other hand, in the already lowly-unionised area of finance, insurance and business services membership declined by a further 18% (2,421 members).
- A steady, if gradual, concentration of membership in CTU affiliated unions: in 2006, CTU affiliates accounted for 89% of all union members, up from 88.4% in 2005.

Methodology

Our survey included those unions registered as at 31 December, 2006, as per the Department of Labour website of registered unions (see www.ers.dol.govt.nz/union/registration.html and the Department's Annual Report 2006). In late January 2006, each of the registered unions was sent a survey requesting membership numbers as at 31 December 2006. One hundred and five unions responded. For those that did not, we obtained details either through telephone contact or

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drawing on the Department's Annual Report 2006. In the time between last year's survey and the return of this year's survey, nine unions deregistered and five new unions registered, bringing the total number of unions to 166 (see Appendix for explanation of union registration under ERA). Five unions out of nine voluntarily deregistered due to amalgamation.

Trade union membership and density

Table 1 summarises the historical trend in trade union membership and union density (defined as the proportion of potential union members who belong to a union¹) for the period 1991-2006. While we provide relevant figures for the total employed labour force (which includes, among others, the self-employed and unpaid family members, who are very unlikely to be union members), the most meaningful measure of union density is the proportion of wage and salary earners.

In our review for 2005, we had reported on the largest single increase in union membership since the IRC surveys began -6.6% (23,290 members). This year, however, the growth in overall numbers has been considerably less impressive, at under 1.4% (5,190 members). Whereas in 2005 union membership outstripped growth in wage and salary earners, in 2006 union membership again fell behind the growth in wage and salary earners, leading to a small decline in union density to 21.7%, from 21.9%. Overall union density has remained within the narrow range of 21 to 22% 1998, indicating a remarkable level of stability.

Table 1: Trade Unions, Membership and Union Density 1991-2006

Year	Union	Number of	Potential union		Union Density	
	membership	unions	membership			
			Total	Wage and		
			employed	salary	(1)/(3)	(1)/(4)
			labour force	earners	%	%
	(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
Dec 2006	382538	166	2109800	1764500	18.1	21.7

Source: Statistics New Zealand, Household Labour Force Survey, Table 3, Table 4.3, Unpublished, 2006. Industrial Relations Centre Surveys.

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).

Union membership and employment by industry

This section of the paper provides a summary of wage and salary earners and union members, according to the Australia New Zealand Standard Industry Classification, during the year to December 2006, in order to indicate the areas of relative union strength and weakness (Table 2). There continue to be wide variations in union membership according to industry, with public and community services, despite a small decline, remaining the contemporary union heartland.

In December 2006, the largest numbers of New Zealand wage and salary earners were in public and community services (425,400); retail, wholesale, restaurants, and hotels (410,000); manufacturing (243,400); and finance, insurance and business services sectors (237,000). Union membership was overwhelming concentrated, in public and community services (203,513), followed by manufacturing (75,588 and transport, storage and communication sectors (42,538). All other industry groupings registered fewer than 19,000 members, with several sectors having fewer than 5,000 members. For example, only 18,335 members of the total retail, wholesale, restaurants and hotels labour force of 410,000 (the largest private sector grouping) are unionised. However, this is the largest gain (24%) we have seen in this industry since we started reporting this information, which mainly due to one union's big campaign. Construction and building services gained 7% this year; with the exception of last year's loss (-9%), this is consistent with the last seven years. The finance, insurance and business services grouping continues to see declines in members (18%) although at more modest rates than last year.

The last column in the table illustrates each industry's contribution to the change (loss or gain) in total union membership. The largest gains were in public and community services (particularly in health and education) and retail, wholesale, restaurants, and hotels. These three industries accounted for 83, 48 and 68% respectively, of the increase in new members. Conversely, manufacturing and finance, insurance and business services mitigated the increase in total union membership by

(-50%) and (-47%) respectively.

Table 2: Distribution of union members and wage and salary earners across industry sectors

Industry Group	Union	Change in	Labour force	Change in	New
	membership	membership	Dec 2006	labour force	members
	Dec 2006	2005-2006		2005-2006	breakdown
		(%)	(000)	(%)	(%)
Agriculture, fishing, forestry etc	3015	-11	82.3	7.2	-7
Mining and related services	1436	-7	6.7	6	-2
Manufacturing	75588	-3	243.4	-2.7	-50
Energy and utility services	3346	-8	8.4	6	-6
Construction & building services	5555	7	132.0	16.5	7
Retail, wholesale, restaurants, hotels	18335	24	410.0	1.2	68
Transport, storage and communication	42538	0.4	104.2	0.5	3
Finance, Insurance and business services	10934	-18	237.0	3.8	-47
Personal and other services	18278	2	115.3	-0.9	7
Public and community services	203513	3	425.4	4.1	127
Govt administration & defence	33049	-1	89.0	7.9	-4
Education	81070	3	154.2	-0.6	48
Health and community	89394	5	182.2	6.3	83
TOTAL	382538	1.4	1764.5	2.6	100

Source: Industrial Relations Centre Survey, 2006

Table 3 summarises how union density has changed in 2006, according to industry grouping. The only areas in which density has increased are retail, wholesale, restaurants and hotels, personal and other services, and (within the public and community services grouping) education. Significant falls (in relation to their already low levels) have occurred in agriculture, fishing and forestry, mining and related services, energy and utility services, construction and building, and finance, insurance and business services.

Table 3: Change in union membership across industry groupings

Industry group	Approx. density	Approx. density	
	2005	2006	
	(%)	(%)	
Agriculture, fishing, forestry etc	4.4	3.7	
Mining and related services	24.5	21.4	
Manufacturing	31.3	31.3	
Energy and utility services	46.1	39.8	
Construction and building services	4.7	4.2	
Retail, wholesale, restaurants, hotels	3.7	4.5	
Transport, storage communication	40.9	40.8	
Finance, insurance and business services	5.9	4.6	
Personal and other services	15.4	15.9	
Public and community services	48.3	47.8	
Govt administration & defence	40.6	37.1	
Education	50.7	52.6	
Health & community services	49.8	49.1	

Source: Industrial Relations Centre Survey, 2006

In our surveys, we ask our union respondents how many of their members work in the private and public sectors respectively (Table 4). This year, we have included the additional 'not for profit' category (4,783 union members) for the first time – this inclusion has had a corresponding impact on the figures for private and public sectors. Despite the slight increase in union membership in private sector and a slight public sector decline, the public sector retains the majority of all union members, with a much higher density (68 to 13, see Table 5).

Table 4: Public, private and not-for-profit union membership

Sector	Dec-05	Dec-06	Change 2005-2006	Change 2005-2006
				(%)
Membership private sector	175415	180360	4945	2.82
Membership public sector	201933	197395	-4538	-2.25
Not for Profit	N/A	4783	N/A	N/A

Source: Industrial Relations Centre Survey, 2006

The relative strength of New Zealand public sector unionisation and the weakness of private sector unionisation is underlined by a comparison with the main Anglophone nations. New Zealand's high public sector union density helps to bring it to an overall level slightly higher than Australia's, although New Zealand private sector union density is lower than the other countries, with the exception of the United States (Table 5). A regeneration of private sector membership remains a major challenge for New Zealand unions.

Table 5: Public/private sector union density – international comparisons

Country	Union density	Public sector	Private sector	Public/Private
				Ratio
New Zealand	22	68	13	5.2
Australia	20	43	15	2.9
Canada	30	71	17	4.2
UK	26	59	16	3.6
USA	12	36	7	5.1

Sources: Statistics New Zealand, QES March 2006;, Australian Bureau of Statistics, 2007; Statistics Canada, 2007; Dept. of Trade and Industry, 2007; Bureau of Labor Statistics, 2007, Industrial Relations Centre Survey, 2006.

Gender and ethnicity

The composition of New Zealand membership has changed massively since the era of predominantly male, full-time employment. As in 2005, women comprised the majority (54%) of union members in 2006, although they constituted only 46% of the New Zealand labour force. (Statistics New Zealand, 2006: HLFS Table 3). Major contributory factors to this change include the high representation of women in public and community services and the decline in traditionally unionised areas of male employment such as manufacturing and mining.

New Zealand's labour force has also become more ethnically diverse. This year 27 unions provided data on ethnicity. These unions covered 283,182 employees or 74%t of total union members. Given that the sample may not be representative of the overall composition of union membership and that the 'Other' category may contain a number of employees for whom unions possess no ethnicity information, the data in Table 6 should be approached with some caution. Nonetheless, our sample of union members indicates considerably lower representation of NZ European/Pakeha than in the general labour force, with Maori slightly over-represented among union members and Pacific Peoples having a considerably greater presence among union members than in the general labour force.

Table 6: Ethnicity by sample and labour force 2006

Ethnic group	Survey sample	Total labour force*
	(%)	(%)
NZ European / Pakeha:	63.7	75
Maori:	11	10
Pacific Peoples:	7.6	4
Asian:	2.8	n/a
Other:	14.9	11
Total	100	100

^{*} Statistics New Zealand, Household Labour Force Survey, December Quarter 2006, Table 5. No breakdown given for Asian working population

Trade union numbers, distribution of membership by size, and affiliation

Over the past two decades, three legislative regimes have had a major impact on overall union membership and on the number and size of individual unions. The Labour Relations Act 1987 required that unions must have a minimum membership of 1,000, providing a stimulus for union amalgamations. There was a related drop in the number of unions during the later years of the 1980s: by 1990 there were only 104 unions, whereas there had been 259 in 1985. However, the Employment Contracts Act 1991 removed the '1,000 member rule', permitted groups of employees (not only registered unions) to negotiate collective contracts, and abolished

registration requirements. Consequently, a considerable number of smaller unions were able to emerge during the 1990s, often within a single workplace, although the largest (10,000+) unions still retained the great majority of union members.

The Employment Relations Act 2000 stipulated that only registered unions could participate in collective bargaining, but its setting of a low membership threshold for registration at 15 members has seen the number of registered unions more than double, with a proliferation of small, often weakly resourced unions. While in 2006 there were 129 unions with fewer than 1,000 members, the substantial majority of union membership remains concentrated in the largest unions, with eight unions accounting for 71% of overall membership. Table 7 shows the number of trade unions, categorised by size, at the commencement and conclusion of the ECA period (1991 and 1999 respectively), and for 2006.

Table 7: Membership by union size 1991 – 2006, selected years

Membership	Dec 1991		Dec 1999			Dec 2006			
range	(#)	Members	(%)	(#)	Members	(%)	(#)	Members	(%)
Under 1000	4	2750	1	48	12703	4	129	20358	5
1000 - 4999	39	87119	17	22	43709	14	22	53199	14
5000 - 9999	9	76489	15	3	19669	7	5	38375	10
10000+	14	347967	68	9	226324	75	8	270606	71
Totals	66	514325	100	82	302405	100	166	382538	100
Av. Size		7793			3688			2437	

Source: Industrial Relations Centre Surveys

In the wake of the ECA, the New Zealand union movement fell into some disarray, leading to a major split which saw the emergence of two competing peak organisations, the Federation of Labour and the Council of Trade Unions. The number of CTU affiliated unions dwindled throughout the 1990s, from 43 in 1991 to 19 in 1999; the proportion of union members covered by CTU affiliates also declined, from 86.5% to 78%. Following the 1999 election of a Labourled government, the TUF reunited with the CTU in 2000. The number of unions affiliated to the CTU has risen under the ERA to 39 in 2006, while the proportion of union members belonging to union affiliates has increased to 89%.

Table 8: NZCTU affiliation 1991 – 2006

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	75.8
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	333395	88.4
2006	39	340281	89.0

Source: Industrial Relations Centre Surveys

Discussion

At first glance, union membership appears to have been remarkably stable since the late 1990s. Yet this picture of overall stability obscures considerable fluctuations at the industry level and in the fortunes of individual unions. For example, in recent years impressive gains have been achieved by unions in very different contexts, such as UNITE and the Service and Food Workers Union among mostly younger, part-time and casual workers in the service sector, and the New Zealand Nurses Organisation in the already highly unionised health sector. However, any substantial increase in overall union density seems improbable without stronger legislative intervention to reduce the incidence of free-riding. The December 2004 amendments to the Employment Relations Act appear to have had little impact in this regard, as unions continue to face a high threshold to demonstrate that passing on to non-union employees has occurred (Blackwood, Feinberg-Danieli, Lafferty and Kiely, 2007).

Last year's report indicated that the re-election of a Labour-led government in September 2005 had given unions an opportunity to consolidate previous gains and seek legislative and institutional improvements. In 2005, we saw the largest increase in union membership in a single year since the Industrial Relations Centre commenced its surveys. This year, there has been a significantly lower gain in overall numbers, with a slight decline in density, while the outlook for unionism in most of the private sector remains bleak. Nonetheless, in recent years there have been definite signs of growing confidence from unions and members, as exhibited by several high-profile campaigns, such as the EPMU's '5 in 05' and UNITE's 'SupersizeMyPay'. The fact that such activity has been prominent across a range of occupations (for example, cleaners, retail workers, teachers, public servants and doctors) is encouraging for unions, since it indicates the possibility of a broader resurgence, within the relatively benign legislative environment provided by the Employment Relations Act.

A change of government could lead to a rapid worsening of that environment, though, especially if current levels of public and community sector employment were not retained. The main principle of National's policy is that there is excessive regulation of the employment relationship, and that employees and employers 'no longer have the freedom to make agreements that suit their own circumstances (New Zealand National Party, 2005). National's plans for industrial relations include the repeal of the December 2004 ERA amendments, ending unions' guaranteed role as the sole collective bargaining agents, and tighter restrictions on union access to workplaces. As Ross Wilson, outgoing President, noted in his opening speech to the CTU's Biennial Conference (October 2007), "it is still not clear that the National Party respects the role of unions as social partners in modern democratic society". Yet the result of the recent Australian election may merit some reflection in this regard. Union and broader community opposition to Work Choices no doubt contributed substantially to the Howard government's demise, and radical changes to industrial relations in New Zealand may be met with comparable opposition.

Thus it remains difficult to predict future union trends. On one hand, the environment of recent years may be as good as it gets for unionism in the foreseeable future. On the other, the notable gains made by unions can provide a substantial platform from which to counter prospective political threats.

References

Australian Bureau of Statistics (2007). Employee Earnings, Benefits and Trade Union Membership, Australia. (cat. no. 6310.0). Canberra: ABS

Blackwood, L., Feinberg-Danieli, G., Lafferty, G. and Kiely, P. (2007). *Employment Agreements: Bargaining Trends and Employment Law Update*. Wellington: Industrial Relations Centre.

Bureau of Labor Statistics. (2007). Union Members Summary, Washington, DC: BLS

Department of Labour (2007) Unpublished data, Wellington; Department of Labour.

Department of Trade and Industry. (2007). Annual Report on Trade Union Membership. London: DTI

Employment Relations Service Website. www.ers.dol.govt.nz/union/registration.html.

New Zealand National Party. (2005). *National's Plan of Employment Law*. National Party: Wellington.

Statistics Canada. (2007). Unionisation: Table 1. Ottawa: Statistics Canada.

Statistics New Zealand. (2002, 2003, 2004, 2005, 2006). *Household Labour Force Survey*. Unpublished reports.

Statistics New Zealand (2006) Quarterly Employment Survey. March 2006.

Appendix One

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.

Notes

¹ 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.

Industry Training Organisations in Changing Times: New Research Possibilities

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Abstract

The tertiary education reforms have placed considerable pressure on Industry Training Organisations (ITOs), which are now required to assume "new roles as strategic leaders in skills and training needs for the industries under their coverage" (Ministry of Education 2003a:21). This paper argues that the Statement of Tertiary Education Priorities (STEP) requirement can lead to productive relationships between ITOs and established research organisations. It considers the new context within which ITOs now operate and offers an illustrative case study of the sort of research that can result from collaborative relationships. Specifically, it reports on research commissioned by the New Zealand Industry Training Organisation (NZITO), which covers dairy manufacturing, meat processing, and leather processing, as part of its strategic planning. The research reported includes: an analysis of the industries covered by the NZITO and their economic significance; the impact of an ageing workforce and other demographic on the labour market and its implications for NZITO industries; the impact of technological change on the labour market; and some of the consequences of the continuing integration of the global economy.

Introduction and Background

This paper considers the emergence of Industry Training Organisations (ITOs) as lead bodies in education and training. Its specific purpose is to examine the possibilities that role provides for productive relationships between ITOs and established research institutions, such as universities. The paper first discusses aspects of the broader policy framework; it then draws on a case study that illustrates research possibilities.

For the last two decades, tertiary education in New Zealand has been subjected to an almost continuous process of "reform," the explicit intent of which has been to reconcile better formal education and the perceived skill needs of the labour market. The latest chapter in the current phase was the second Tertiary Education Strategy (TES) and the associate Statement of Tertiary Education Priorities (STEP) (Ministry of Education, 2006).

As we discuss more extensively elsewhere, the reform process has moved through three distinct phases, each of which has been driven by a particular ideological perspective; these can be loosely categorised as: "residual labourist" (1987-1990); "neo-liberal" (late 1990 to late 1999); and "third way" (late 1999 to present) (Law, 1994, 1996a, 1996b, 1998, 2003a,

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2003b; Law and Piercy, 1999, 2000a, 2000b, 2000c, 2004; Piercy, 1999, 2003, 2005). Each phase has been pursued by a particular government (Labour, National, and Labour-led) and, of course, has been tied inextricably to each government's broader industrial relations policy. With respect to workers' education and training, the present, third way phase is characterised by steering mechanisms, a qualified tripartite (employers, unions, and government) framework, and a measure of understanding of the wider social context and associated broader learning needs.

A common theme throughout the reform process since 1987 has been a determination on the part of successive governments to involve key stakeholders more directly in both the formulation and implementation of their particular tertiary education strategy. However, Labour and National parties have differed as to who constitutes "a key stakeholder".

In the late 1980s, the Labour Government promoted an inclusive notion of stakeholders that included workers and their unions. Thus its notion of an "industry-led" approach retained a significant residue of the tripartite framework that had long characterised the vocational training sector. The 1990s National Government broke with that tradition. Its neo-liberal approach placed a much stronger emphasis on employer leadership, voluntary participation, a market model of delivery premised on competition between education providers, and the "new" human capital perspective that regarded skills and knowledge as a "private good" (Marginson, 1993, 1997).

As elaborated below, we hold that the 1990s was a wasted decade for industry education and training. Framed by a market model of educational demand and deliver, National's 1992 Industry Training Act (ITA) was hampered by a lack of any strategic policy direction, the inherent weakness of ITOs, and the limitation of their role. Furthermore, as a direct consequence of both the neo-liberal voluntarist approach and the impact of the 1991 Employment Contracts Act (ECA) unions were, to varying degrees, steadily sidelined, even in industries, such as dairy manufacturing, that had remained substantially unionised (Law, 1998, 2003a; Law and Piercy, 2000c; 2004; Piercy, 2003).

We further hold that by the end of the decade, there was widespread agreement that the market model was failing. This was captured in Labour's 1999 election manifesto which foreshadowed a more "hands-on" approach to industry training.

The Policy Background and the Changing Role of ITOs

What distinguishes the present, third phase from the 1990s is the new role envisaged for ITOs.

Very early in the reform process (the late 1980s), ITOs were seen as the appropriate vehicle to provide strategic leadership to worker education and training. However, the change of government at the end of 1990 not only delayed the enabling legislation it also resulted in a retreat from a strategic approach and the favouring of a market model of demand and provision. Not surprisingly therefore, the Industry Training Act 1992 (ITA), which provided

for the establishment of ITOs, differed quite significantly from Labour's draft legislation. Under the ITA, an ITO could be formed by two or more enterprises that had similar inputs and outputs. Further, unions had no statutory right to ITO membership; their participation was effectively determined by employers (Law and Piercy, 2000a; Murray, 2001; Piercy, 1999). A number of ITOs did include union representation.

National's voluntaristic approach led to a very ad hoc development of ITOs. In practice, their responsibility was to design education and training for an industry and to purchase its delivery from separate providers. These could include polytechnics but there was considerable government encouragement to use and build private training establishments (PTEs). ITOs have also been responsible for monitoring trainee's progress through their training programmes (Green, Hipkins, Williams and Murdoch, 2003; Murray, 2001; Piercy, 1999). Under National, funding was inadequate. Again, the market model assumed that employers and, increasingly, learners would pay for much of the training. The extension of the student loan scheme was linked to this "new" human capital perspective that viewed the acquisition of skills as a private good (Piercy, 1999, 2005).

As noted earlier, by 1999 there was a widespread recognition that the market model had failed (Doyle, 1999). Labour's (1999) manifesto document 21st Century Skills: Building Skills for Jobs and Growth outlined its views on the limitations of National's industry training system and foreshadowed its subsequent more directive approach, its quite strong inclination towards legislation and semi-regulatory underpinnings and a more pronounced, "third way" notion of partnership (Cochrane, Law and Piercy, 2004b; Law, 2003a, 2003b; Law and Piercy, 2004; Piercy, 2003; 2005).

The Education (Tertiary Reform) Amendment Act 2002 provides the legislative framework for the establishment of the Tertiary Education Commission (TEC), the adoption of five-year, tertiary education strategies, and the creation and implementation of the STEPs. Each STEP, published at least every three years, outlines the priorities that are needed to work towards the Government's six strategies (Ministry of Education, 2002a). The current Minister for Tertiary Education, Michael Cullen, called for submissions on the shape of the new TES and next STEP (Ministry of Education, 2006). Submissions closed in October 2006. These resulting changes build on those established by the first three STEPs outlined below.

The three STEP documents published to date demonstrate the impact of the TES on ITOs. The first STEP (2002-2003) outlines the extent to which elements of the market model have been retained in order to ensure responsiveness on the part of Tertiary Education Organisations (TEOs). However, future-oriented statements in the first STEP and in the two subsequent STEPs signalled the Government's intention to provide a more certain and supportive policy climate in order to promote collaboration between key stakeholders (Ministry of Education, 2002b). Briefly, the current charters and profiles process requires TEOs to focus on the achievement of both the TES and the six national goals while the discussion around the "distinctive contribution" of TEOs effectively defines their nature and scope (Tertiary Education Commission, 2004a, 2004b).

For the most part, the priorities in STEP 2003-2004 remained largely unchanged from the first, given that the reform process had not yet finished (Ministry of Education, 2003a). But for the purposes of this paper, a significant shift in emphasis allowed for a greater leadership role for industry training and its stakeholders: ITOs, employers and unions (Ministry of Education, 2003b).

The key priority for the period covered by the third STEP, 2005-2007, is to improve "the quality and relevance of tertiary teaching, learning and research" (Ministry of Education, 2005:1). This longer term STEP "focuses on securing the shifts that the education reforms were designed to bring about" by reiterating more firmly how funding via the profile process will be linked to an organisation's ability to provide relevant courses (Tertiary Education Commission, 2005:1), This statement makes it clear that the development phase is over and that organisations involved in the provision of tertiary education (which now includes industry training and adult and community education) will have to demonstrate the ability to meet targets or risk losing public funding. It also created impetus for the re-development of the funding system and a new emphasis on student completions (Cullen, 2006).

Those involved in the provision of education and training related to industry training have the opportunity to benefit significantly in this new environment; the Government has made quite clear that through increased funding it will give priority to TEOs that support research and innovation that contribute to social and economic development (Piercy, 2005).

The Role of Research in the New Environment

One of the most obvious limitations of the reforms is the assumption that all TEOs, including, for the purposes of this paper, ITOs, have the immediate capacity to provide the strategic leadership expected of them. There are at least two aspects of this issue that concern us here. First, the assumption that each ITO represents an "industry" is unsound on at least three counts: (a) while there has been some rationalisation of ITOs, there is still a patchwork of coverage with some serious overlaps; (b) employer participation remains voluntary; and (c) many employers appear to lack a commitment to industry training. Second, even where ITOs have good industry coverage and employer participation, it is optimistic to assume that they have the immediate capacity to exercise the strategic leadership that is now expected of them.

Fortunately, we do have a very good, recent example of what a sector/industry strategy might look like. In August 2006, the Government's Food and Beverage Sector Taskforce released its forward-looking report: *Smart food, cool beverage: New Zealand's future in the food and beverage sector.* In June, that taskforce's Skills Working Group released a companion document: *Skills action plan for the food and beverage sector.* Together, those reports offer both a strategic direction and an associated skills development policy. In that sense, the two reports illustrate what can be achieved when resources are dedicated to fund reasonably adequately, sensible, focused research that informs a committed team of sector stakeholders. But in another sense, the two reports highlight just how much work is required if other sectors

and industries are to accept the Government's challenge to adopt integrated strategies with a high level of industry ownership.

The *Skills action plan for the food and beverage sector* report highlights some of the practical challenges facing the sector. For example, it emphasises as a high priority the need for better labour market information. The report also identifies an encouraging range of research that either has been undertaken or which is underway. Under the broad heading, "More strategic investment in training," it explores a number of areas that require more investigation. Examples include: the exploration of industry best practices with respect to skill development; exploration of ways to improve the ability of the skills and training system to adapt rapidly to change; and the review of the quality and relevance of sector qualifications. Of considerable interest to us are the suggestions in the report that the sector takes advantage of the possibilities inherent in the very exciting New Zealand Council of Trade Union's (CTU) "Workplace Learning Representatives" project. The report also notes the challenges posed by multiple ITOs: "of the approximately 40 ITOs that have been in operation since 2002, eight are important in facilitating industry-specific training relevant to the food and beverage sector" (Food and Beverage Task Force (Skills Working Group), 2006:40).

Case Study

Background

It is against the broad background sketched above that we now focus on some of our work which we present here as an abbreviated case study. That research dovetails quite neatly with the Food and Beverage Taskforce's reports in that we have had two commissions from a major food and beverage ITO, the New Zealand Industry Training Organisation (NZITO) to undertake labour market research with respect to dairy manufacturing. The first study was a demographic report on the NZITO's trainee profile (Cochrane, Law and Piercy, 2004a). The second study, which is discussed here, examined the possible impact of contemporary labour market trends on industries covered by the NZITO (Cochrane, Law and Piercy, 2006).

Demographic Change

The first task was to provide the ITO with easily understood information about demographic change. This information should be useful, of course, for almost all ITOs.

It is well known that western societies are under going significant demographic change with declining fertility and mortality contributing to the median age in these societies increasing markedly from around 28 in 1950 to a projected value of about 39 in 2020 (U.S. Census Bureau, 2000). New Zealand is no exception, though the comparatively high fertility rates of the Maori and Pacific Peoples has moderated this effect when compared to some northern European and Asian societies, with the proportion of the New Zealand population aged over 65 projected to increase from around 12% in 2001 to nearly 20% in 2026 (Statistics New Zealand, 2005). The changes occasioned by these demographic trends are likely to be both

broad and profound with two effects in particular being of significance to industry training organisations.

First, the decline in the proportion of persons aged under 15 years implies a reduction in the in-flow of new workers to the labour market and raises the possibility of pervasive labour shortages. This supply side problem can be mitigated in two ways, increasing labour market participation by peripheral and non-traditional groups¹ and increasing productivity. In respect to the former point should non-traditional and peripheral groups be drawn into labour market participation the challenge for ITOs will be to develop training programmes that address the specificities of these groups and recognise the factors that have hitherto, and no doubt continue to mitigate against their participation in the labour market.

It should be noted that the demographic changes alluded to above will not proceed in an even fashion. Spatially the age structure, migration, fertility and mortality of different regions can vary greatly resulting in marked heterogeneity in the sub-national experience of ageing. This will magnify the labour supply problems of those industries, the meat processing industry and to a lesser extent dairy manufacturing being examples, which are generally located in peripheral regions subject to large out migration flows in the prime working age groups and appreciably higher rates of ageing. Equally it is important to note that the process of age structural change does not proceed in a linear fashion in which an ordered array of cohorts moves through the age structure with the larger "baby boom" cohort leading. Rather the population size in an age group can change quite radically over a five-year period as differently sized population cohorts move through the population structure creating wave effects. These wave effects can result in marked fluctuations in the size of cohorts at ages with high propensities to engage in training hence ITOs can be confronted with substantial fluctuations in the demand for training driven by purely demographic factors (see Lepina and Pool, 2000; Pool and Cheung, 2003; Rindfuss, 1991 for a discussion of this effect).

In terms of the productivity effects of population ageing it has been estimated that the effects of these demographic changes will be equivalent to, approximately, an annual reduction of 0.24 percentage points in labour productivity growth; that is, from around 1.5% to 1.26% per annum (Guest et al., 2003). Given the magnitude of this decline it would seem plausible that the rate of productivity growth could increase sufficiently to compensate for this decline. However achieving an increase in long run productivity growth will require a considerable up grading of the skill levels of the labour force. Moreover, given the reduced inflows of new workers this upgrading of human capital must be made in large part with the (ageing) stock of existing workers (Albrecht et. al., 2006).

This brings us to the second effect of population ageing of relevance to ITOs. ITOs will be training, and frequently retraining, older workers which, while sharing many of the characteristics of their younger counter-parts, also have a number of specific characteristics that will have to be accommodated. For instance, the physiological consequences of ageing impact on the productivity of individual workers.

There is evidence that while older workers remain highly productive within a field that they know well and where long experience is beneficial, when they perform work where they are required to reorient themselves to new task requirements and to solve novel problems their performance is below that of younger workers. This effect appears to be compounded by the work/task complexity; that is, as task complexity increases mental agility becomes more important compounding the age-induced productivity effect (Myerson et al., 1990), This can become particularly problematic, as the pace of technological change increases the importance of being able to assimilate new techniques and adapt to new ways of working (Skirbekk, 2003:7-8), However at least for some skills, such as literacy skills, there appears to be a "use it" or "lose it" dynamic with workers who are employed in environments that require continual learning being less susceptible to a decline in their ability to acquire new skills (OECD, 1998:138), This implies that any tendency for the ability to acquire new skills to decline with age can, at least in part, be ameliorated by continued training.

Technological Change

We have also attempted to examine technological change.

Technological change has been a pervasive feature of modern life with every indication that the pace of this change is unlikely to decelerate in the near future. In terms of specific technologies that are likely to become widely adopted in the immediate future, Karoly and Panis (2004) have identified three key areas; continued development of current integrated circuit technology (ICT), nanotechnology and biotechnology.

The current technologies used in the manufacture of integrated circuits have not yet reached their limits and are unlikely to do so for 10 to 20 years. Continued development of ICT will facilitate the development of more sophisticated manufacturing robotics which in turn will support the adoption of agile manufacturing strategies; that is, strategies built round rapidly reconfigurable or retoolable machines that can switch between producing a wide variety of products in response to consumer demand. This implies major changes in the fields of manufacturing logistics and inventories (Anderson et al., 2000) which themselves will be promoted by the introduction of faster and more flexible technology. In addition, the increasing sophistication of robotic systems will allow the automation of routine tasks of relatively high levels of complexity. For instance, in the food processing sector there is increasing use of robotics with the development of robotic, primal cutting systems in the pork processing industry (Purnell and Brown, 2003), similar systems for scribing (Li and Hinsch, 2003) and for brisket sawing beef carcasses (Templer et al., 1998), Y-cutting mutton carcasses (Hurd et al., 2005) and the boning of fish fillets (Malone et al., 1994).

Nanotechnology refers to technologies that are able to manipulate matter at an atomic level. This has obvious applications in the development of esoteric materials; however the full impact of the technology spans the fields of biology, chemistry, physics, engineering, and computer science. Initially, that is over the next 10-15 years, it is likely that nanotechnology will be used to enhance existing technologies through, say, the production of lighter, tough, harder and more flexible alloys. In the longer term, the ability to manipulate basic molecular

structures, such as proteins and nucleic acids, will allow the creation of novel chemicals and pharmaceutical products and the combination of organic and synthetic materials to merge biological functions with other desirable material properties (Karoly and Panis, 2004: 96-97). The science and technology consultancy, Helmut Kaiser (2004), estimated that the market for "nano-products" in the food and beverage packaging sector alone would increase from 2004 US \$860 million in 2004 to over 2004 US \$30 billion, around 25 per cent of the market, over the next decade.

Biotechnology broadly refers to "techniques that use organisms or their cellular, sub cellular or molecular components to make products or modify plants, animals, and micro-organisms to carry desired traits" (Paugh and Lafrance, 1997:9). This technology is frequently controversial as it encompasses areas such as genetic engineering, the mapping of the human genome, the extension of human life and even the creation of artificial life forms. All of these applications raise tremendous ethical issues (see Sherlock and Morrey, 2002, or Burley and Harris, 2002 for introductions to the ethical implications of biotechnology). However should these objections be overcome the increasing understanding of the nature of complex organic processes will allow substantial gains in productivity and the creation of new applications and products. For instance in dairy, this could range from the production of hardier more prolific pasture plants, to the use of enzymes to improve the efficiency of cows in converting pasture to milk or the suitability of milk for further processing.

These innovations all have the potential to profoundly reshape the labour market. Karoly and Panis (2004:102) have identified a number of likely, changes:

- Automation and investment in new technology may lead to higher productivity but reductions in the size of the work force.
- Demand for workers with higher levels of education is increasing as some jobs, particularly those cannot easily be automated, become more specialised and require greater analytic and problem-solving skills.
- Increasingly remuneration is increasingly being tied to skill with the result that the pay
 differential between those with higher levels of skills and those with lower levels of skill
 is increasing.
- With greater specialisation and work products that can be digitised and distributed over electronic networks, it becomes possible to redistribute workers across geographically dispersed work sites rather than requiring workers to be collocated.
- The incorporation of new technologies requires the reorganisation of work to account for the new responsibilities and level of decision making required of workers in various occupations.
- Adapting to technological change often requires retraining workers so that they are able to work with the new technology and within new organisational structures.

Discussion: Relating Impacts to High Performance Work

That list of likely impacts has some direct crossover to the work our expanded research team is currently undertaking with respect to high performance workplaces systems (hpws) (see Cochrane et al., 2006; Cochrane, Dharmalingam, Harris, Law, and Piercy, 2005; Cochrane, Law and Piercy, 2004c; Cochrane et al., 2005a, 2005b; Law and Cochrane, 2004), Fonterra, along with other forward-thinking manufacturing companies worldwide, recognises the advantages of hpws. However there is considerable evidence in the literature that we have reviewed to suggest that successful worker participation in such systems is more likely when a genuinely co-operative approach is employed to both introduce and sustain those systems. The notion of "worker voice" appears to be quite significant as there is also evidence to suggest that such systems work better in unionised environments and with active union involvement.

Ashton and Sung (2002) identify four dimensions of haws: "employee autonomy and involvement in decision-making support for employee performance, rewards for performance, and the sharing of information and knowledge" (p.12). From our preliminary work we have developed a better appreciation of the collective nature of workers' learning, knowledge and attributes. Many writers hold that considerations of professional identity, work identity, and group identity – including that of union member – are all of critical importance when attempting to understand the nature and acquisition of workplace skills. Our review of the research literature led us to conclude that the majority verdict with respect to haws, although a conditional one, is that haws provide net gains to both employers and employees. This majority verdict also seems to hold that for haws to succeed, they require an environment in which all parties to the employment relationship are committed to the success of the project and work in good faith for its achievement.

Further, the relevant learning literature challenges an instrumentalist approach to the introduction and implementation of haws and the education and training associated with such systems. It also underscores the collective dimension of workplace culture and the learning that takes place at work. In the context of the industries covered by the NZITO and within the existing employment relations setting, the majority verdict on haws noted above, especially when read in conjunction with the selected insights provided from the workplace learning literature, implies that for haws to produce "win-win" outcomes, the employer, the union and the workforce as a whole must act together to promote the necessary trust and cooperation.

Conclusion

The point of this paper has been to highlight the research possibilities that have opened up as a result of the tertiary education reforms. In particular, we have focused on the challenges faced by ITOs as they assume responsibility for providing strategic leadership with respect to skills development and training. In this paper we take the view that possibilities can only be appreciated and taken advantage of when the context is clearly understood. To that end, we have not only sketched the context but also made a number of observations about the political

economy of education and training. We have argued that recent work in the Food and Beverage Sector highlights not only what can be achieved when resources are dedicated to systematic inquiry but also the further research that needs to be funded if the full value of that work is to be realised. Our brief discussion of recently completed research commissioned by the NZITO illustrates the contribution that can be made, at a more micro level, by quite small research units, such as the University of Waikato's Centre for Labour and Trade Union Studies. Finally, we also indicate how such work can be linked to other relevant, current research.

Finally, although we have not discussed this possibility above, we hold that there is much to be gained from closer trans-Tasman co-operation around research topics of common interest. For example, we have developed links with colleagues in Australia who are investigating the adoption by Australian workplaces of the same hpws that we are studying in Fonterra. Another productive line of inquiry is the possible application to New Zealand of the notion of "skills ecosystems" and the recommendations made by John Buchanan (2006) in a report for the New South Wales Government. An emerging researcher associated with our Centre, Victoria West (2006), has been exploring those recommendations in relation to the Food and Beverage Sector Taskforce's skills report.

References

Albrecht, J., van den Berg, G.J., and Vroman, S. (2006), The Aggregate Labor Market Effects of the Swedish Knowledge Lift Program, *Discussion Paper No. 2385*, Bonn, Institute for the Study of Labor.

Anderson, R.H., Antón, P.S., Bankes, S.C., Bikson, T.K., Caulkins, J., and Denning, P. (2000), *The Global Course of the Information Revolution: Technological Trends; Proceedings of an International Conference*, Santa Monica, RAND Corporation.

Ashton, D., and Sung, J. (2002), *Supporting Workplace Learning for High Performance Working*, Geneva, International Labour Office.

Bryant, J., Jacobsen, V., Bell, M., and Garrett, D. (2004), Labour Force Participation and GDP in New Zealand, *Working Paper No. 04/07*, Wellington, The Treasury.

Buchanan, J. (2006), From "Skill Shortages" to Decent Work: The Role of Better Skill Ecosystem, Sydney, University of Sydney.

Burley, J. and Harris, J. (2002), A Companion to Genetics, Malden, MA., Blackwell Publishers.

Cochrane, W., Dharmalingam, A., Harris, P., Law, M., and Piercy, G. (2005), *Skill Needs and Worker Voice in High Performance Workplaces: A Case Study of the Dairy Industry, Literature Review*, Hamilton, New Zealand, Centre for Labour and Trade Union Studies, University of Waikato.

Cochrane, W., Law, M., and Piercy, G. (2004a), *Demographic Report on the Trainee Profile of the New Zealand Industry Training Organisation*. (Commissioned report for the NZITO), Hamilton, Centre for Labour and Trade Union Studies, University of Waikato.

Cochrane, W., Law, M., and Piercy, G. (2004b), Skills Forecasting and Industry Training Pathways. Paper presented to the *Industry Training Federation Vocational Education Research Conference Forum*, June, Hotel Intercontinental, Wellington.

Cochrane, W., Law, M., and Piercy, G. (2004c), The Knowledge Society and High Performance Workplace Systems: Enhancing Worker Voice, in Blumenfield, S.B., and Lafferty, G. (eds) *Labour Employment and Work in New Zealand: Proceedings of the Eleventh Conference*, November 22-23. Wellington, Industrial Relations Centre, Victoria University of Wellington, 79-90.

Cochrane, W., Law, M., and Piercy, G. (2005a), *The Food and Beverage Sector: A Trade Union Perspective*, Hamilton, Centre for Labour and Trade Union Studies, University of Waikato.

Cochrane, W., Law, M., and Piercy, G. (2005b), Lean, but is it Mean? Union Members' Views on a High Performance Workplace System, in Baird, M., Cooper, R., and Westcott, M. (eds.), Reworking Work AIRAANZ 05 Refereed papers, Proceedings of the 19th conference of the Association of Industrial Relations Academics of Australia and New Zealand. Sydney, University of Sydney, 129-138.

Cochrane, W., Law, M., and Piercy, G. (2006), *Possible Impact of Contemporary Labour Market Trends on Industries Covered by the New Zealand Industry Training Organisation*, (Commissioned report for the NZITO), Hamilton, Centre for Labour and Trade Union Studies, University of Waikato.

Cullen, M. (2006), Ensuring Quality and Relevance – Future Directions of Tertiary Funding. Speech, retrieved 4th April 2006, http://www.beehive.govt.nz/ViewDocument.aspx?
DocumentID25358.

Doyle, S. (1999), Workers' Organisations and Private Sector Training: The New Zealand Council of Trade Union's Strategy for a Skilled Workforce, Paper to *ILO APSDEP Regional Seminar*, Chiba, Japan.

Food and Beverage Taskforce (2006), *Food and Beverage Taskforce*, Retrieved June 2006, http://www.nzte.govt.nz/section/13685.aspx.

Food and Beverage Taskforce (2006), *Smart Food, Cool Beverage: New Zealand's Future in the Food and Beverage Sector*, Wellington, Food and Beverage Taskforce.

Food and Beverage Taskforce (Skills Working Group), (2006), *Skills Action Plan for the Food and Beverage Sector*, Wellington, Food and Beverage Taskforce.

Green, N., Hipkins, C., Williams, P., and Murdoch, C. (2003), *A Brief History of Government Funding for Industry Training 1989-2002*, Wellington, Industry Training Federation.

Guest, R., Scobie, G., and Bryant, J. (2003), Population Ageing in New Zealand: The Impact on Living Standards and the Optimal Rate of Saving with a Flexible Real Exchange Rate, *Working Paper No. 03/34*, Wellington, The Treasury.

Helmut Kaiser Consultancy (2004), *Nanotechnology in Food and Food Processing Industry Worldwide* 2003-2006-2010-2015, Tuebingen, Helmut Kaiser Consultancy.

Hurd, S.A., Carnegie, D.A., Brown, N.R., and Gaynor, P.T. (2005), *Development of an Intelligent Robotic System for the Automation of a Meat-Processing Task*, International Journal of Intelligent Systems Technologies and Applications, 1(1/2): 32-48.

Karoly, L.A., and Panis, C.W.A. (2004), *The 21st Century at Work Forces Shaping the Future Workforce and Workplace in the United States*, Santa Monica, RAND Corporation.

Law, M. (1994), Adult Education and Working People: A Critical Reappraisal, in Klenovesk, T. and Olesen. H. (eds), *Adult Education and the Labour Market*, Ljubljana, Slovenia Adult Education Centre, 146-183.

Law, M. (1996a), Worker Education and Training in a Voluntarist Environment: What Role for Unions? in Olessen, H. (ed.), *Adult Education and the Labour Market II*, Roskilde (Denmark), University of Roskilde, 117-133.

Law, M. (1996b), Workers' Education and Training in a New Environment, in Benseman, J., Findsen, B., and Scott, M. (eds), *The Fourth Sector: Adult and Community Education in Aotearoa/New Zealand*, Palmerston North, Dunmore Press, 159-176.

Law, M. (1998), Market Oriented Policies and the Learning Society: The Case of New Zealand, in Holford, J., Jarvis, P., and Griffen, C. (eds), *International Perspectives on Lifelong Learning*, London, Kogan Page, 168-179.

Law, M. (2003a), Unions and Social Policy: Enhancing Educational Opportunities for Workers, in Jorgensen, C.H., and Warring, N. (eds), *Adult Education and the Labour Market VII*, vol. A, Roskilde University, Roskilde, Denmark, 9-33.

Law, M. (2003b), Bringing the State back In: New Directions in Trade Union Education in a Small Democracy, in Flowers, D. *et al.* (eds), *Proceedings of the 44th Adult Education Research Conference*, San Francisco, San Francisco State University, 235-240.

Law, M., and Cochrane, W. (2004), *Interim Report NZ Dairy Workers' Union Manufacturing Excellence Survey 2003*, Hamilton, Centre for Labour and Trade Union Studies, University of Waikato.

Law, M., and Piercy, G. (1999) Workplace Democracy and Training Reform: Some Emerging Insights from Australia and New Zealand, in Salling Olesen, H. and Jackson, K. (eds), *Adult Education and the Labour Market V*, Roskilde, Denmark, Roskilde University Press, 63-86.

Law, M., and Piercy, G. (2000a), Training and the New Industrial Relations: New Zealand Research that Explores Streeck's Thesis, Paper presented at *Adult Education Research Conference*, Vancouver, June.

Law, M., and Piercy, G. (2000b), The Carmichael Vision and Training Reform: Some Insights from across the Tasman, in Burgess, J., and Strachan, G. (eds), *Research on Work, Employment, and Industrial Relations 2000: Conference Proceedings, Vol. 2*, Newcastle (Australia), AIRAANZ/University of Newcastle, 141-150.

Law, M., and Piercy, G. (2000c), Unions and Education and Training Reform: A Neglected Story, Paper presented to the *New Zealand Association for Research in Education Conference*, Hamilton, December.

Law, M., and Piercy, G. (2004), The "Knowledge Society" or the "Knowledge Economy": Does it Really Matter? Paper presented to *ESREA Network Conference:Learning Participation and Democracy*, October, Barnham, Britain.

Lepina, M., and Pool, I. (2000), Social and Spatial Differentials in Age-Structural Transitions. Implications for Policies on Ageing. *Espace, Populations, Societies, 3*: 399-410.

Li, Z., and Hinsch, A. (2003), A New Approach to Detect the Cutting Positions for a Robotic Beef Carcass Scribing System, Paper presented at the 2003 Australasian Conference on Robotics and Automation, Brisbane.

Malone, D.E., Friedrich, W.E., Spooner, N.R., and Lim, P.P.K. (1994), Knowledge Based Control in the Processing of Highly Varying Product, Paper presented at the *IEEE International Conference on Robotics and Automation*, San Diego.

Marginson, S. (1993), *Education and Public Policy in Australia*, Melbourne, Cambridge University Press.

Marginson, S. (1997), Markets in Education, Sydney, Allen & Unwin.

Ministry of Education (2002a), *Tertiary Education Strategy* 2002/07, Wellington, Ministry of Education.

Ministry of Education (2002b), Statement of Tertiary Education Priorities 2002/03, Wellington, Ministry of Education.

Ministry of Education (2003a), *Statement of Tertiary Education Priorities* 2003/04, Wellington, Ministry of Education.

Ministry of Education (2003b), Press Statement, *Statement of Tertiary Education Priorities* 2003/04, Retrieved 10 September 2003, http://minedu.govt.nz/ http://minedu.govt.nz/ print_doc.cfm?layout=documentid=7366&data=1&fromprint=y

Ministry of Education (2005), Press statement, *Statement of Tertiary Education Priorities* 2005/07, Retrieved 6 July 2005, http://www.minedu.govt.nz/index.cfm?layout=document&documentid=10296&data=1.

Ministry of Education (2006), *The Developing the Second Tertiary Education Strategy*, Ministry of Education, Wellington.

Murray, N. (2001), A History of Apprenticeship in New Zealand, Unpublished Masters Thesis, Lincoln University, Christchurch, New Zealand.

Myerson, J.S., Hale, D., Wagstaff, L., Ponn, W., and Smith, G.A. (1990), The Information Loss Model: A Mathematical Theory of Age-Related Slowing, *Psychological Review*, 97(4): 475-486.

New Zealand Labour Party (1999), 21st Century Skills: Building Skills for Jobs and Growth. Retrieved 24 April 2002, http://www.liveupdater/com/labourparty/print.a sp?ArtlD= 2069458396.

Organisation for Economic Cooperation and Development (1998), Work Force Ageing: Consequences and Policy Responses, *Working Paper No. 4.1*, OECD.

Paugh, J., and Lafrance, J.C. (1997), *The U.S. Biotechnology Industry*, Washington, D.C, U.S. Department of Commerce, Office of Technology Policy.

Pool, I., and Cheung, J. (2003), A Cohort History of Mortality in New Zealand, *New Zealand Population Review*, 29(2): 107-138.

Piercy, G. (1999), Strategy and Vision: The Influence of the AMWU on the NZEU 1987-1992 with Respect to Education and Training Reforms, Unpublished MSocSc Thesis, University of Waikato, Hamilton, New Zealand.

Piercy, G. (2003), A "Third Way" in Industry Training: New Zealand's Adaptation of Selected British Policies, in Jorgensen, C.H., and Warring, N. (eds), *Adult Education and the Labour Market VII*, Vol. A, Roskilde, Denmark, Roskilde University Press, 35-62.

Piercy, G. (2005), Riding the Knowledge Wave: An Examination of Recent Work-Based Learning in New Zealand, in Hager, P., and Hawke, G. (eds) proceedings of the 4th International Conference on Researching Work and Learning, 12-14 December, 2005, Retrieved from OVAL research Group, University of Technology, Sydney (UTS CD-ROM, 2006 Release),

Purnell, G., and Brown, T. (2003), Automation for the Meat Industry, *New Food Magazine*, 3, 80-85.

Rindfuss, R. (1991), The Young Adult Years. Diversity, Structural Change and Fertility, *Demography*, 28(4): 493-512.

Sherlock, R., and Morrey, J.D. (eds.), (2002), *Ethical Issues in Biotechnology*, Lanham, Md, Rowman and Littlefield.

Skirbekk, V. (2003), Age and Individual Productivity: A Literature Survey, *Working Paper No. 2003-028*, Rostock, Max Planck Institute for Demographic Research.

Statistics New Zealand (2005, 28 February), Statistics New Zealand, Medium Sub National Population Projections: 2001 (base) - 2026, Series 5. Retrieved 16 December, 2005, http://www.stats.govt.nz/products-and-services/info-releases/nat-pop-proj-info-releases.htm

Tertiary Education Commission (2004a), *The Distinctive Contributions of Tertiary Education Organisations: A Tertiary Education Commission Consultation Paper*, Wellington, Tertiary Education Commission.

Tertiary Education Commission (2004b), Summary of Responses to the Tertiary Education Commission Consultation Paper: The Distinctive Contributions of Tertiary Education Organisations, Wellington, Tertiary Education Commission.

Tertiary Education Commission (2005), Press Statement, *Statement of Tertiary Education Priorities* 2005/0, Retrieved 6 July 2005, http://tec.govt.nz/about_tec/strategy/step/step.html

Templer, R.G., Nicholls, H.R., and Nicolle, T. (1998), Robotics for Meat Processing - From Research to Commercialisation, Paper presented at the *1st International Workshop on Future Automation for Meat Processing*, Frankfurt.

The Treasury (2004, 28-29 July), Productivity Workshop, Retrieved 27 October 2005, http://www.treasury.govt.nz/productivity/default.asp.

The Treasury (2005, 14-15 April), Workshop on Labour Force Participation and Economic Growth, Retrieved 27 October 2005, http://www.treasury.govt.nz/lfpw/default.asp.

U.S. Census Bureau (2000), An Ageing World: 2001, U.S. Census Bureau.

World Tribune (2006), New Nanotech Armor Called 5 times Stronger than Steel [Electronic Version]. *World Tribune*. Retrieved January 9, http://www.worldtribune.com/worldtribune/WTARC/2006/me_military_01_09.html.

West, V. (2006), Developing Skills Eco-Systems: The Application of Australian ideas to New Zealand. Paper presented to *Sociological Association of Aotearoa-New Zealand Conference*, University of Waikato, 23 November.

Notes

¹ See Bryant et. al. (2004) for a discussion of this in respect of prime age women and the more general discussion in the papers arising from the treasury participation and productivity workshops (The treasury, 2004, 2005)

² An early example of such a usage was the announcement by an Israeli firm, ApNano, that nano-engineered armour five times stronger than steel and twice as strong as any impact-resistant material used in protective gear would enter volume production as early as 2009 (World Tribune, 2006)

Public Sector Pay Premium and Compensating Differentials in the New Zealand Labour Market

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Key Words: compensating differentials, propensity score matching, public sector

Abstract

In this article, propensity score matching (PSM) methods are applied to data from the 2005 International Social Survey Program Work Orientations (ISSP-WO) survey to examine the public sector pay premium in New Zealand. Taking account of a wide range of worker characteristics and attitudes, job attributes, and the effects that jobs have on workers and their family life, there appears to be a pay premium from working in the public sector of 17-21%.

Introduction

The rising public sector wage bill is a key feature of the New Zealand labour market. This reflects not only the growth of the public sector, but also improvements in remuneration for public sector workers. For example, according to the Quarterly Employment Survey (QES), for the decade prior to the current Labour Government's election in 1999 average private sector wages were at least 80% of those in the public sector. Since then there has been a steady decline in pay parity, with average private sector wages being below 75% of public sector wages since 2005. There have also been improvements in non-wage benefits for the public sector, including the State Sector Retirement Savings Scheme which since 2005 has provided 3% matching employer contributions to employee retirement savings; well before and well above the level of employer contributions for other workers under KiwiSaver.

Some analysts have suggested that this rising remuneration for public sector workers reflects an asymmetry in employment relations between the public and private sectors. Since governments have statutory power to raise taxes, with large tax surpluses in the recent New Zealand case, they may not face the same financial pressures that inhibit wage rises in many private firms. This asymmetry also reflects the difficulty for taxpayers, who are the ultimate employer of public servants, to ensure that they are well represented in the wage negotiation process (Grimmond, 2007). Moreover, bureaucrats may have both a supply and

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demand role since they can influence the size of public sector employment, and hence face less of a trade-off between wage increases and employment than do other workers (Dahlberg and Mörk, 2006). Finally, since many public sector services are essential, an inelastic product demand contributes to inelastic labour demand, providing more scope for union activity to raise public sector pay. Therefore, it is unsurprising that unions have higher membership rates in the public sector than the private sector (Gregory and Borland, 1999).

However, improvements in the relative pay of public sector workers may also reflect changes in skill demands and job attributes between public and private sectors. These differences in job attributes have been found to account for much of the pay difference between public and private sectors in the U.K. (Bender and Elliott, 2002). However, other studies find that fringe benefits, such as holiday allowances, job security and pension schemes, are more generous for public sector workers (e.g., Poterba and Rueben, 1998), and that overall job satisfaction is higher (Demoussis and Giannakopoulos, 2007) so compensating differentials would imply lower public sector wages to offset these more favourable job conditions.

Since workers may choose to work in the sector that best suits their mix of observable and unobservable characteristics, any evaluation of the net advantages of public sector employment also needs to take such selection into account. For example, Bellante and Link (1981) find that public sector employees are more risk averse than their private sector counterparts. Therefore statistical methods used to estimate the public sector pay premium should compare public sector workers only with similar workers from other sectors. Such a comparison should also control for differences in productivity-related characteristics and in the positive and negative features of jobs that give rise to compensating pay differentials.

In this research note, propensity score matching (PSM) methods are applied to data from the 2005 International Social Survey Program Work Orientations (ISSP-WO) survey to examine the public sector pay premium in New Zealand. These PSM methods involve matching public sector workers to similar workers in other sectors to estimate the public sector pay premium once worker and job characteristics are controlled for. The ISSP-WO data are uniquely suited to this purpose since in addition to recording sector of employment and standard characteristics like age, education, gender and ethnicity they also record job attributes such as stress, insecurity, and interference with family life. The other main surveys for studying workers in New Zealand (the Income Survey, formerly known as the Income Supplement to the Household Labour Force Survey, and the three-yearly Household Economic Survey) do not record sector of employment and have no details on job characteristics.

Data

ISSP Work Orientations Survey

The ISSP surveys are carried out each year in approximately 30 countries, with a common set of questions asked of a probability-based, nationwide sample of adults. The topics of the survey change each year, with work orientations previously studied in 1989 (when New Zealand did not participate) and in 1997 (when the coding for sector of employment appeared to be different to other years).³ In each participating country, samples of between 1000 and 2000 adults are collected, with 1309 respondents in the New Zealand survey. While the ISSP data are often used for labour market studies (for example, see Sousa-Poza and Henneberger, 2002) they have not previously been used in New Zealand. Moreover, the results from the 2005 ISSP-WO have only recently become available to researchers.

Descriptive Comparisons of Public Sector Workers and Job Attributes

The ISSP-WO data include detailed information on the characteristics of respondents and their general attitudes to work. For those working for pay, their job attributes and the effect of their main job on the respondent and their family life are also recorded. The attitudinal and job attribute variables are recorded using five-point Likert scales. A description of these four sets of characteristics for public sector workers and other workers is reported in Table 1. The sample is restricted to those respondents that were working for pay at the time of the survey and had non-missing values for all of the variables in Table 1 (n=786).

There are a number of differences between public sector workers and other workers in both observable characteristics and attitudes, as outlined in table 1. The public sector workers are more highly educated (by 1.3 years on average), are more likely to be female (70% versus 46%) and to reside in the Wellington region. They are also more likely to believe that an important feature of a job is that it is useful to society. However, contrary to previous overseas findings (for example, Bellante and Link, 1981), there is no significant difference across sectors in workers' attitudes to job security.

The attributes of jobs and their effects on workers and their family life also differ significantly between sectors. Public sector workers are more likely to find that their jobs are interesting, helpful to others and useful to society (in each case as evaluated by the worker themselves) and are less likely to do hard physical work. Offsetting these positive attributes of jobs, public sector workers report that they are less able to work independently, are more likely to find that their jobs are stressful and that their work interferes with family life.⁴

The survey also asks respondents to report their own pre-tax yearly income from all sources (using ten income brackets), with an additional question on their household income. While there is no question on earnings, for the respondents who are currently working most of their annual personal income should come from labour earnings. The logarithm of annual income is therefore used as the proxy measure of pay in this study.

This same proxy is used in New Zealand studies based on Census data (e.g. Maani, 1996) and is also used in international comparative studies using ISSP data (e.g., Blanchflower, 1996). According to this proxy, the raw premium for working in the public sector is approximately 11%.⁵

Table 1: Differences between Public Sector Workers & Other Workers

	<u>en Public Sector Workers</u> Public Sector Workers		Other	<i>p</i> -value	
			Workers		for equal means ^a
	3.6	Standard	3.6	Standard	means
	Mean	Deviation	Mean	Deviation	
Personal characteristics					
Age	43.430	12.091	42.496	13.225	0.421
Years of education	15.289	2.518	13.969	2.804	0.000
Male	0.296	0.458	0.536	0.499	0.000
European/Pakeha	0.800	0.401	0.808	0.394	0.833
Married or de facto	0.644	0.480	0.667	0.472	0.623
Reside in Auckland region	0.200	0.401	0.287	0.453	0.025
Reside in Wellington region	0.178	0.384	0.086	0.281	0.008
Job attributes (1=strongly agree	e, 5=strongly d	lisagree)			
My job is secure	2.193	1.096	2.316	1.046	0.160
My job is interesting	1.867	0.853	2.077	0.850	0.005
I can work independently	2.148	0.943	1.880	0.816	0.003
In my job I can help others	1.659	0.693	2.071	0.855	0.000
My job is useful to society	1.630	0.751	2.298	0.954	0.000
Job helps improve my skills	1.956	0.929	2.077	0.905	0.110
Effect of work on the responde	ent (1=always	, 5=never)			
Come home exhausted	2.667	0.898	2.799	0.872	0.125
Do hard physical work	3.859	1.094	3.498	1.276	0.002
Find work stressful	2.704	0.865	2.998	0.864	0.000
Face dangerous conditions	3.867	1.132	3.952	1.179	0.309
Interferes with family life	3.237	0.940	3.421	0.976	0.037
Job is just a way to earn money	3.615	1.113	3.496	1.151	0.258
Job security is important to me	1.652	0.746	1.688	0.679	0.443
Job helping others is important	1.896	0.756	1.994	0.708	0.127
Job that is useful to society is important	1.785	0.651	2.098	0.776	0.000
Pre-tax annual income (log)	10.580	0.634	10.476	0.769	0.099
Sample size (% of total)	135	(17.2)	651	(82.8)	

Propensity Score Matching Estimates of the Public Sector Pay Premium

Public sector workers differ from other workers in many observable and unobservable ways, so simple comparisons of mean earnings are unlikely to provide an unbiased estimate of the premium that would accrue to a given worker moving from the private to the public sector. While ordinary least squares (OLS) regression is a method that can control for differences in average characteristics, many studies show that this method is less successful at dealing with the sample selection problem that occurs when subjects in non-experimental studies cannot be randomly assigned to "treatment" and "control" groups. Such problems are relevant to attempts to measure the public sector pay premium since workers may choose their employment sector according to where their various talents will be most rewarded.

Propensity-score matching (PSM) is an increasingly popular non-experimental evaluation method, with proponents claiming that it can replicate experimental benchmarks when appropriately used (Dehejia and Wahba, 2002). Using PSM to estimate the public sector pay premium requires first estimating a probit equation for the probability of a worker being in the public sector. The resulting propensity score then allows each public sector worker to be matched only to those private sector workers whose characteristics give them similar predicted probabilities of being in the public sector. A comparison of the two matched samples then gives an estimate of the "average treatment effect" which in this case is the premium that would accrue to a given worker moving from the private to the public sector. In other words, PSM offers a way of structuring non-experimental data to look like experimental data, where for every subject in the "treated" group, the researcher finds comparable subjects in the "control" group. Several matching approaches are available, including matching each treated observation, i to the nearest neighbour (or neighbours) from the control group, and kernel matching where a weighted average of the j control group neighbours is taken with weights proportional to the closeness of propensity scores for i and j.

To implement the PSM estimates of the public sector pay premium, allowing for differences in productivity-related characteristics and the positive and negative features of jobs that give rise to compensating pay differentials, a series of probit equations were estimated. In each case the dependent variable was an indicator variable for whether the ISSP-WO respondent was working in the public sector. The first probit equation explained this choice of employment sector using only the personal characteristics of the worker listed in Table 1. The resulting propensity score and matching estimates of the public sector pay premium therefore are only able to control for worker characteristics. The second probit equation includes job attributes along with personal characteristics and so gives a way of seeing how the estimated pay premium changes once the most obvious sources of compensating differentials are accounted for. The third probit equation includes the effects of the job on the worker and their family, which may give another source of compensating differentials. The fourth probit equation includes worker attitudes along with

personal characteristics, while the fifth includes all four sets of variables (i.e., all of those described in Table 1).

Results

The propensity scores for public sector workers from the first probit equation, which controls for personal characteristics, range from 0.027 to 0.567. The propensity scores for other workers range from 0.002 to 0.552, and have a much lower mean. Figure 1 illustrates these in the form of kernel densities. It is apparent that there while some private sector workers have characteristics like those of public sector workers many others do not, given that the highest frequency of propensity scores for private sector workers occurs around 0.1, while the propensity scores for the majority of public sector workers are above 0.25. Therefore in all of the results that follow, estimation of the average treatment effect is restricted to the area of common support, where the two distributions overlap. Thus, private sector workers who are quite unlike public sector workers are not used in the comparisons.

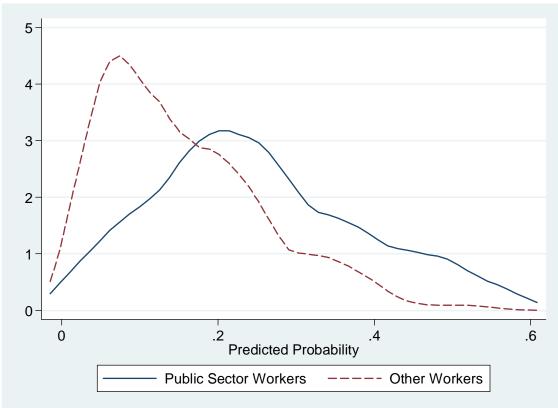


Figure 1: Propensity Scores for Public Sector and Other Workers

The estimates of the average treatment effect, which is the gain in log income accruing to a given worker moving from the private to the public sector, are reported in Table 2.⁶ These come from a kernel matching procedure where the log income of each public sector worker is compared with a weighted average of the log incomes of those private sector workers whose propensity scores are similar. To interpret the results it is useful to recall that the raw premium for working in the public sector is approximately 11% (based on a difference in log income of 0.104).

When age, education, gender, ethnicity, marital status and location are accounted for, the premium for working in the public sector is estimated as 13%. This is derived from a treatment effect for log income of 0.122. Since this is slightly larger than the raw premium it implies that the pay gap between the public and private sector is not due to differences in the average level of productivity related characteristics for the workers in each sector.

Table 2: Propensity Score Matching Estimates of the Average Treatment Effect of Public Sector Employment on (log) Annual Income

Control Variables	Average Treatment Effect	Bootstrapped Standard Error	95% Confidence Interval
Personal characteristics only (age, education, gender, ethnicity, marital status, location)	0.122	(0.058)	0.002 - 0.233
Personal characteristics + job attributes (job is: secure; interesting; improves skills; helps others; useful to society; allows independent work)	0.188	(0.084)	0.003 - 0.338
Personal characteristics + effects of the job on the worker (come home exhausted; hard physical work; stressful; dangerous; interferes with family life)	0.122	(0.064)	-0.003 – 0.226
Personal characteristics + worker attitudes (important for job to: be secure; to help others; be useful to society; job just a way to earn money)	0.128	(0.074)	-0.001 – 0.283
Personal characteristics + job attributes + effects of the job on the worker + worker attitudes	0.158	(0.072)	0.005 - 0.295

Source: Author's calculations from 2005 ISSP data for New Zealand.

The estimated public sector pay premium is considerably larger, at 21%, when job attributes are also controlled for. Thus the public sector premium does not appear to be due to compensating differentials. Public sector workers benefit from having jobs that are more interesting, skill-augmenting, useful to society and helpful to others (as evaluated by the worker), so compensating differentials would require them to be paid less not more. Since they are paid more, accounting for job attributes makes the unexplained premium for working in the public sector even larger.

Neither the effect of jobs on the worker nor worker attitudes make much difference to the estimated treatment effect. Specifically, the estimated public sector pay premium is almost unchanged, at 13% and 13.7%, when these two sets of variables are used to calculate the propensity scores in addition to personal characteristics. When all four sets of variables are included, the average treatment effect is 0.158, which implies that the pay premium for working in the public sector is 17%. Since this estimate is based on comparisons only with private sector workers who have similar characteristics and attitudes, and similar job attributes and effects, it should be a valid estimate of what a given worker would gain when moving from the private to the public sector.

Conclusions

The study outlined in this research note has used data from the 2005 International Social Survey Program Work Orientations (ISSP-WO) survey to examine the public sector pay premium in New Zealand. Recent commentary has highlighted the improvement in relative remuneration in the public sector compared with the private sector. However, such changes might just reflect changing skill composition and job attributes for the public and private sector so they are not a reliable estimate of the pay premium that would accrue to a given worker moving to the public sector.

Therefore it is necessary to use micro data on worker characteristics and job attributes and an estimation method that can identify the public sector pay premium even when there is self-selection of workers into public or private sectors. The ISSP-WO data and propensity score matching techniques used here should provide reliable estimates of the public sector pay premium. Taking account of a wide range of worker characteristics and attitudes, job attributes, and the effects that jobs have on workers and their family life, there appears to be a pay premium of 17-21%, which is not due to compensating differentials.

References

Bellante, D. and Link, A. (1981). Are Public Sector Workers More Risk Averse than Private Sector Workers? *Industrial Labor Relations Review*. 34(3): 408-412

Bender, K. and Elliott, R. (2002). The role of job attributes in understanding the public-private

wage differential. Industrial Relations 41(3): 407-421

Blanchflower, D. (1996). The Role and Influence of Trade Unions in the OECD. Discussion Paper no.310. *Centre for Economic Performance*. London School of Economics.

Dahlberg, M. and Mörk, E. (2006). Public Employment and the Double Remployment and the Double Role of Bureaucrats. *Public Choice*. 125(3): 387-404.

Dehejia, R. and Wahba, S. (2002). Propensity Score Matching Methods for Non-experimental Casual Studies. *Review of Economics and Statistics*. 84(1): 151-161

Demoussis, M. and Giannakopoulous, N. (2007). Exploring Job Satisfaction in Private and Public Employment: Empirical Evidence from Greece. *Labour*. 21(2): 333-359

Gregory, R. and Borland, J. (1999). Recent Development in Public Sector Labor Markets. In *Handbook of Labor Economics*. (eds). O, Ashenfelter and R, Layard. 3573-3630. North Holland: Amsterdam

Grimmond, D. (2007, October 4). Generous to a Fault. Dominion Post.

Maani, S. (1996). Private and Social Rate of Return to Secondary and Higher Education in New Zealand: Evidence from the 1991 Census. *Australian Economics Review*. 113(1): 82-100

Poterba, J. and Rueben, K. (1998). Fiscal Institutions and Public Sector Labor Markets. Working Paper 6659. *National Bureau of Economic Research*. Cambridge, Mass.

Sousa-Poza, A. and Henneberger, F. (2002). An Empirical Analysis of Working-house Constraints in twenty-one Countries. *Review of Social Economy*. 60(2): 209-242

Appendix A: Probit Estimation Results Used to Construct Propensity Scores

Years of education charactery istics (PC) 4tributes Work Work Wittidudes All variables Years of education 0.120 0.119 0.110 0.135 0.129 Age 0.052 0.048 0.049 0.061 0.053 Age 0.052 0.048 0.049 0.061 0.053 Age squared -0.000 -0.000 -0.000 -0.001 -0.000 -0.001 -0.000 -0.001 -0.000 -0.001 -0.000 -0.001 -0.000 -0.001 -0.000 -0.001 -0.000 -0.001 -0.000 -0.001 -0.000 -0.001 -0.000 -0.001 -0.000 -0.001 -0.000 -0.001 -0.000 -0.001 -0.000 -0.001 -0.000 -0.001 -0.000 -0.001 -0.000 -0.001 -0.000 -0.01 -0.000 -0.01 -0.001 -0.001 -0.009 -0.001 -0.009 -0.01 -0.009 -0.001 -0.001 -0.001 -0.001 -0.001 -0.001 -0.001		Personal	PC	PC	PC +	
Years of education 0.120 (5.37)** 0.119 (4.80)** 0.110 (4.60)** 0.135 (5.48)** 0.129 (4.60)** Age 0.052 (0.048 0.049 0.061 0.053 0.048 0.049 0.061 0.053 0.048 0.049 0.061 0.053 0.048 0.049 0.061 0.053 0.048 0.049 0.061 0.053 0.000 0.00						
Age (5.37)** (4.80)** (4.46)** (5.48)** (4.60)** Age 0.052 0.048 0.049 0.061 0.053 (1.74)+ (1.44) (1.48) (1.96)+ (1.61) Age squared -0.000 -0.000 -0.001 -0.000 Mariced -0.586 -0.561 -0.668 -0.559 -0.601 Married -0.144 -0.023 -0.141 -0.129 0.04 Married -0.143 -0.075 -0.113 -0.100 0.041 Muckland -0.381 -0.427 -0.381 -0.311 -0.100 0.041 Muckland -0.358 -0.427 -0.383 -0.341 -0.530 0.280 0.298 0.393 Wellington 0.261 0.355 0.280 0.298 0.393 Wellington 0.261 0.355 0.280 0.298 0.393 Wellington 0.261 0.352 0.280 0.298 0.393 Magree		istics (PC)	attributes	Work	Attitudes	variables
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Age squared		(5.37)**	(4.80)**	(4.46)**	(5.48)**	(4.60)**
Age squared	Age	0.052	0.048	0.049	0.061	0.053
Male		(1.74)+	(1.44)	(1.48)	(1.96)+	(1.61)
Male -0.586 -0.561 -0.668 -0.559 -0.601 Married -0.164 -0.023 -0.141 -0.129 0.014 Married -0.164 -0.023 -0.141 -0.129 0.019 Pakeha -0.143 -0.075 -0.113 -0.100 0.041 (0.98) (0.46) (0.72) (0.65) (0.23) Auckland -0.358 -0.427 -0.383 -0.341 -0.530 Wellington 0.261 0.355 0.280 0.298 0.393 Wellington 0.261 0.352 0.280 0.298 0.393 Wellington 0.261 0.352 0.280 0.298 0.393 My job is secure: 0.032 0.034 0.049	Age squared	-0.000	-0.000	-0.000	-0.001	-0.000
Married (5.08)** (4.28)** (5.20)** (4.55)** (4.26)** Married -0.164 -0.023 -0.141 -0.129 0.014 (1.27) (0.16) (1.03) (0.97) (0.09) Pakcha -0.143 -0.075 -0.113 -0.100 0.041 (0.98) (0.46) (0.72) (0.65) (0.23) Auckland -0.358 -0.427 -0.383 -0.341 -0.530 Wellington (2.61) (3.55) (2.28) (2.23)* (3.05)** Wellington (2.61) (3.35) (2.28) (2.28) (3.39) Wellington (2.61) (3.35) (2.28) (2.298) (3.39) Wellington (2.61) (3.12)* (1.55) (1.69)* (1.94)* My bitington (2.61)* (2.21)* (2.21)* My bitington (3.28) (2.21)* (2.21)* Neither agree nor disagree -0.0312 -0.0312 -0.049 (2.21		(1.29)	(1.07)	(1.06)	(1.59)	(1.19)
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Pakeha		(5.08)**	(4.28)**	(5.20)**	(4.55)**	(4.26)**
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In my job I can help others: Disagree -0.005 -0.005	116.00					
<i>Disagree</i> -0.005 -0.005	In my job I can heln others:		(3.23)			(3.00)
			-0.005			-0.005
(0.02)	Disagree					
			(0.05)			(0.02)

Neither agree nor disagree	-0.171		-0.298
	(0.57)		(0.92)
Agree	-0.276		-0.353
	(0.61)		(0.86)
My job is useful to society:	,		,
Disagree	-0.756		-0.654
o .	(3.80)**		(2.78)**
Neither agree nor disagree	-1.282		-1.057
	(5.12)**		(3.36)**
Agree	-1.676		-1.356
O .	(4.49)**		(3.43)**
My job helps improve my skills:	(, , ,		()
Disagree	0.214		0.192
	(1.19)		(1.11)
Neither agree nor disagree	0.305		0.259
	(1.26)		(1.00)
Agree	0.899		1.106
	(2.96)**		(3.20)**
Strongly agree	-0.328		-0.356
strongly agree	(0.47)		(0.47)
Come home exhausted:	(0.17)		(0.17)
Often		-0.084	-0.171
ojien		(0.32)	(0.61)
Sometimes		-0.302	-0.319
Sometimes		(1.14)	(1.07)
Hardly ever		-0.137	-0.076
Thurwy ever		(0.44)	(0.22)
Never		-0.368	-0.436
110001		(0.73)	(0.81)
Do hard physical work:		(0.75)	(0.01)
Often		0.351	0.204
ojien		(0.92)	(0.54)
Sometimes		0.712	0.754
Sometimes		(1.92)+	(2.02)*
Hardly ever		1.094	1.124
Thurwy ever		(2.85)**	(3.06)**
Never		0.950	1.110
110707		(2.42)*	(2.90)**
Find work stressful:		(2.12)	(2.50)
Often		-0.519	-0.600
Official		(1.82)+	(1.89)+
Sometimes		-0.517	-0.570
Sometimes		(1.84)+	(1.82)+
Hardly ever		-0.498	-0.523
iim my crei		(1.59)	(1.47)
Never		-1.206	-1.655
146461		(2.22)*	(3.09)**
Face dangerous conditions:		(2.22)	(3.09)
Often		-0.031	-0.179
Officia		-U.U <i>J</i> 1	- U.1/3

Sometimes Hardly ever Never	(0.08) -0.161 (0.47) -0.303 (0.87) -0.728 (2.07)*		(0.41) -0.387 (0.95) -0.447 (1.07) -0.805 (1.94)+
Job interferes with family life: Often	0.272		0.005
Sometimes	(0.68) 0.322 (0.83)		(0.01) 0.147 (0.36)
Hardly ever	0.372 (0.92)		0.249 (0.60)
Never	0.147 (0.34)		-0.162 (0.35)
Job is just a way to earn money: Agree		0.142	0.020
Neither agree nor disagree		(0.47) 0.564	(0.06) 0.388
Disagree		(1.84)+ 0.166 (0.59)	(1.15) 0.027 (0.09)
Strongly disagree		0.168 (0.56)	-0.135 (0.41)
Job security is important to me: Agree		-0.108	-0.148
118,000		(0.87)	(1.05)
Neither agree nor disagree		-0.323	-0.591
		(1.25)	(1.66)+
Disagree		-0.410	-0.299
Strongly disagree		(0.99) 0.744	(0.66) -0.093
Strongty disagree		(0.83)	(0.11)
Job helping others is important: Agree		-0.010	0.081
118,000		(0.06)	(0.43)
Neither agree nor disagree		0.352 (1.58)	0.394 (1.57)
Job useful to society is important		` /	` /
Agree		-0.211	-0.133
Neither agree nor disagree		(1.25) -0.714	(0.72) -0.453
		(3.24)**	(1.79)+

Constant	-3.525	-3.089	-3.308	-3.881	-2.985
	(5.23)**	(3.93)**	(3.57)**	(5.09)**	(2.95)**
Zero-slopes test (chi squared)	61.7**	177.5**	115.4**	100.0**	194.2**
Pseudo R-squared	0.101	0.248	0.160	0.140	0.316

Notes:

Robust z statistics in parentheses; + significant at 10%; * significant at 5%; ** significant at 1%. N=786.

The dependent variable is an indicator for whether the worker is employed in the public sector. With the exception of age and education, all other explanatory variables are dummy variables. Excluded category for each variable measured with a Likert scale is the response coded "1", which is typically "strongly agree" or "always" depending on the context. Dummy variables are dropped from the estimation if they perfectly predict the dependent variable.

Notes

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¹ According to Statistics New Zealand's Labour Market Statistics 2006 there were 45,000 more full-time public sector employees in March 2006 than in March 2000. This growth of 24.7 percent compares with 22.7 percent in the private sector. Details are at: http://www.stats.govt.nz/analytical-reports/labour-market-statistics-06.htm

² These averages are for ordinary time hourly earnings of both sexes combined (INFOS codes: EESQ.SASG9A (public) and EESQ.SASH9A (private)) and are reported in Grimmond (2007).

³ Specifically, in the New Zealand component of the 1997 survey, 58% of those currently employed are given a code of "Not Available" for the question on sector of employment.

⁴ This interference with family life does not appear to stem from any difference in work hours, with the mean work week reported as 37 hours by respondents in both sectors.

⁵ This is calculated from the difference in the logarithm of pre-tax annual incomes (10.580-10.476=0.104). The percentage difference is then: $100 \square [\exp(0.104) - 1] = 10.96\%$.

⁶ The results of the underlying probit equations used to generate the propensity scores are in Appendix A.

Revisiting the Job Guarantee: Ten Propositions towards a Model for New Zealand

THOMAS LANGE*

Abstract

This policy commentary complements the research report on *Transition Assistance for Young People*, released by the New Zealand Mayors' Taskforce for Jobs. It provides a snapshot at the international evidence concerned with job guarantee and welfare-to-work initiatives. Against this background, ten policy propositions are presented to inform the design of a Guarantee-style programme that meets the needs of New Zealand's dispersed and spatially unbalanced labour market.

Introduction

In June 2006, the New Zealand Mayors' Taskforce for Jobs released a research report on *Transition Assistance for Young People* (Higgins et al. 2006). In the Taskforce's 2007 Annual Report, Mayors and local government officials expressed their commitment to "using the information [of the report] to inform future policy and activities particularly around youth transitions and keeping young people engaged in our communities" (Mayors' Taskforce for Jobs 2007:9).

This commentary revisits one of the report's primary objectives: to examine the possibility of introducing a guarantee for all people under the age of 25 to be in paid work, training, education or in useful activities in our communities.

A snapshot at the international evidence of related job guarantee initiatives is being provided with the intention to inform the ongoing deliberations of relevant policy makers. Whilst Mitchell, Cowling and Watts (2003) already draw on experiences in Norway (Hummeluhr 1997) and the Netherlands (van Berkel 1999; Brodsky 2000), this paper, without attempting to be exhaustive, complements their arguments by reference to selected experiences in North America and the United Kingdom.

On this basis, ten propositions are offered to provide a platform for further debate, challenging the conventional wisdom and promoting the design of a Guarantee-style programme that is best tailored to New Zealand's labour market conditions.

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Job Guarantee: Old Wine in New Bottles?

In much of the OECD, concern about the changing composition as well as the numbers of young and long term benefit recipients has been growing. Whereas most claimants some thirty years ago were considered unavailable for work due to disability and illness, for example, the majority of working age claimants is now available for work but not employed. The weight attached to different explanations has changed over time (including labour taxation, employment protection, trade union activity, and systems of unemployment support; see e.g. Kluve and Schmidt 2002) and in recent years politicians and policy makers have attributed growing importance to the problems faced by particular claimant groups — most prominently the long-term unemployed and the young. As both, the scale and duration of unemployment spells for these target groups reached unprecedented and persistently high levels in a number of countries, the focus on welfare-to-work and job guarantee initiatives sharpened.

At the outset, it is unremarkable to state that such programmes are not new. A wide range of local, regional and national policy instruments has been employed to reduce the barriers into paid employment, and various forms of training and work creation schemes have been developed, often through a combination of voluntary incentives and mandatory requirements (for example, the UK's New Deal programme; Ontario Works; British Columbia Benefits; British Columbia Youth Work, the Alloa Initiative in Scotland as well as a range of other local pilot programmes). At the same time, more demand-responsive initiatives, which include employers within local partnerships providing job or interview guarantees for programme participants, were developed as a means of delivering training and employment that is relevant to the needs of the labour market and provides security and long-term benefits for job seekers (e.g. Hoogvelt and France 2000; Adams et al. 2001). As a consequence and throughout OECD member states, a consensus emerged asserting that economic recovery will not on its own resolve the societal ills of youth and long-term unemployment and respective welfare dependency.

Against this background, a policy proposal to target youth and long-term unemployment has gained in prominence: the *Job Guarantee* (Mitchell 1998; Mitchell and Watts 2002; Mitchell et al. 2003; Quirk et al. 2006). Developed and advocated by economic policy research centres in Australia (the Centre of Full Employment and Equity (CofFEE) at the University of Newcastle), North America (Centre for Full Employment and Price Stability – CfEPS, Kansas City) and Europe (CofFEE Europe, Maastricht) the proposal encompasses two policy initiatives:

- 1. A Job Guarantee for all long-term unemployed; and
- 2. A Youth Guarantee, comprising opportunities for education, technical training, and/or a place in the Job Guarantee program for all 15-19 year olds who are unemployed.

Specifically, under this proposal the Federal Government maintains a "buffer stock" of jobs available to policy target groups. What is more, the Guarantee

"...would be funded by the Commonwealth but organised on the basis of local partnerships between a range of government and non-government organisations. Local governments would act as employers, and [...] workers would be paid the Federal minimum award. Any unemployed teenager (15-19 year old) who was not participating in education or training would receive a full-time or part-time job. Equally, all long term unemployed persons would be entitled to immediate

employment under this scheme [...] positions could be taken on a part-time basis in combination with structured training." (Mitchell, Cowling and Watts 2003:7)

Such an initiative would thus be funded centrally and made operational at the local level. In Australia, and specifically in the Hunter region, this proposal was unanimously endorsed by local businesses, the Hunter Region Organisation of Councils and the Trades Hall Council and adopted as official policy by Newcastle City Council. With this growing momentum, the Job Guarantee's underlying principles have also attracted the attention of policy makers and policy interest groups elsewhere, including the *Mayors Taskforce for Jobs* in New Zealand.

This interest should come as no surprise. Based on quarterly New Zealand Household Labour Force Survey data, youth unemployment in New Zealand is more than quadruple the general unemployment rate. For example, during the four quarters between September 2006 and June 2007, youth unemployment rates for the 15-19 year olds averaged 14%, compared with a general unemployment rate in New Zealand of 3.7% during the respective period. In a similar vein, long-term unemployment remains a stubbornly persistent phenomenon. Of the total number of people unemployed, 16.7 percent were in the long-term unemployment category in the June 2007 quarter, up from 15.2 percent recorded in the June 2006 quarter.

However, two important questions remain largely unexplored. Can the Job Guarantee proposal be emulated for application in New Zealand? What lessons have been learned from international job guarantee experiences elsewhere?

The Public Sector as Employer of Last Resort?

One of the crucial, underlying assumptions behind the Job Guarantee model is that much unemployment occurs due to demand deficiencies and that the jobs on offer would be drawn from a pool of public sector jobs that support community development and advance environmental sustainability. As such, publicly created demand would meet unfulfilled supply, and workers would participate in community-based, socially beneficial activities that have intergenerational payoffs, including urban renewal projects, community and personal care, and environmental schemes. It is claimed that much of this work is both worthwhile and labour intensive, and would require little in the way of capital equipment and training. Moreover, it would be of benefit to communities experiencing chronic unemployment. It is in this sense that the proposal is being presented as a new paradigm in employment policy.

Whilst the envisaged scale and focus of the proposed initiative on excluded communities probably deserves the new paradigm description, some of its building blocks draw heavily on previous experiences, such as Britain's Community Programme for the unemployed, which was introduced during the early 1980s (Finn, 1988). Not unlike the Guarantee proposal, participation in the Community Programme was open to both, the young and the long-term unemployed. Until October 1987, participation was aimed at unemployed people aged over 25 who had been without work for more than twelve months and at 18 to 24 year olds who had been unemployed for six months. Equally, the work carried out had to be additional to conventional jobs and services and was primarily focused on projects of community benefit. The elements of a *guaranteed* job and payment at a fixed rate (the Federal minimum award) represent the most significant differences between both initiatives. In Britain, by contrast, not

everyone who wanted to participate was able to do so¹, and Community Programme workers were paid the going wage rate for the job (at least, until the 1986 Social Security Act when the controversial "Benefits Plus" package was introduced).

Notwithstanding the similarities and differences between previous programmes, however, what remains truly unclear is the extent to which the proposed model, if thought to be beneficial, can be emulated in other countries, including New Zealand.

At a time when unemployment in New Zealand is amongst lowest in the OECD, sufficient numbers of employment opportunities of the described nature may be available to meet the likely demand for them. Even then, however, the distribution of available jobs may be uneven. Some localities may find it relatively easy to identify and offer community development jobs, but others may not. And even if local asymmetries could be ignored, it remains far from certain as to whether there is sufficient public sector capacity to accommodate respective job requirements if the count of the jobless increases. In such a world, it is important to examine if the model can also be applied, at least in part, to job guarantees in the private as well as the public sector.

Whilst international approaches are without clear and consistent guidelines over time and whilst the question of compatibility with other countries' labour markets has thus far remained largely untested, a number of interesting findings have nevertheless come to light. A summary of selected findings and their policy repercussions are brought forward in the following pages.

Responsibilities and the Importance of Job Preparation

Some form of reciprocal agreement between the government and the individual is usually required for any kind of active labour market policy intervention. It follows that active labour market policy interventions carry responsibilities for Government to be active in reducing barriers to work, not just the claimant. However, it is noteworthy that some of the existing programmes are more active than others; indeed, some find it difficult to be enforced. In some American states, for example, lone parents have been exempted from schemes because the states did not provide a guarantee of adequate childcare. Until they did, the courts ruled that mandatory participation could not be initiated (McCormack and Oppenheim 1998).

The mix between government and individual responsibility also varies. For example, *Ontario Works* was a mandatory programme offering three streams of Employment Support, Community Placement and Employment Placement (Government of Ontario 1992; 1997). The programme's mission was to secure the 'shortest route possible to a job'. According to those who designed the programme, if an employer offered a job, which did not actually require basic literacy and numeracy skills, the Province did not consider it had a responsibility to provide training to those who lack such skills. Despite Guarantee proponents' claims that the guaranteed public sector jobs require little in the way of skills and training, it is doubtful that many such jobs paying minimum wage and meeting minimum standards will be available. As such, the Ontario experience is revealing: it shows a laying off of risk onto the individual where neither the employer nor the government considers it their

72

¹ However, it is worth noting that in 1986/87, the Community Programme provided jobs for over 307,000 unemployed claimants at an overall cost in excess of £1 billion.

responsibility to invest in a second chance of basic education. Whilst it may be possible to secure a job without these skills, the odds are against keeping it and moving into a better job.

If this risk is to be reduced, publicly funded investment in job preparation is arguably essential. This then indicates that finding the shortest route to paid employment may not necessarily be a suitable and sustainable approach for all participants. Some may need to move through a number of stages before they will be in a position to hold down a job. The Ontario experience together with what is known from other countries (including research evidence from the UK and Australia on the barriers of the long term unemployed and the most disaffected in the labour market) holds some important lessons for any attempts in New Zealand to introduce a job guarantee initiative. It may be in no-one's interest if the first destination for a group of the most disaffected is formal training, full-time, or even a part-time job. Some participants will face numerous hurdles in their lives implying that work, training and learning are simply unrealistic first options. Care leavers, the homeless, those with drug and alcohol problems and young offenders are among those most at risk of being unable to hold down one of the options without co-ordinated effort to address the other barriers.

In a number of countries, these concerns have been taken seriously. What is more, they have also been acted upon. Added at a late stage to plans for the UK's New Deal, for example, the "Gateway period" offered up to four months of job preparation before the core options (employment, training) commenced. It certainly had the potential to make a Guarantee initiative work for some of the most difficult to reach target groups. A wage subsidy is little compensation to the employer, including Local Government, who recruits someone lacking in the basic skills required in the labour market. Without these as the building block, many will be reluctant to invest in job-specific skills even if a training allowance covers respective costs. If the young unemployed are to be offered the guarantee of a job with training and further learning opportunities, private or public sector employers will also seek a guarantee of employability. It is therefore vital that something like a "Gateway Period" is included, tailored and appropriately resourced.

Focus, Timing and Targets

Given what is known about the link between poor educational attainment and long-term benefit reliance, it is commonly agreed that the most poorly qualified should be encouraged to join early. Longitudinal panel analysis in British Columbia influenced the Province's decision to open its *Youth Works* programme to 16 to 18 year olds where appropriate, even though they fell outside the original target group. Moreover, it became apparent that those who dropped out of school early should not be forced to complete their education before being allowed to work. A period of work experience may act as a route back into learning. If a family member, career adviser or income support officer advises a young unemployed to go back to school, the latter is likely to take only limited notice. However, the incentive may be different if a youngster has gained some work experience and if the respective employer advises to complete the educational qualification, and then to come back for a guaranteed job.

It should therefore be possible to move away from a *Job* Guarantee towards a *Generic Guarantee* initiative for the young (and potentially for those as young as 14 or 15 who have all but given up on formal education or training) and to offer a mixed package of work experience, education, assisted job search and ultimately the take-up of sustainable employment for those under-18s who are, at any rate, likely to join a work creation or

Guarantee scheme in the coming years. As for the targeted age brackets, it should also be noted that the original Guarantee proposal concurs entirely:

"A person who can remain attached to paid employment has greater prospects or upward mobility, than if they languish for years in long-term unemployment. A teenager who is engaged in useful activity at an early age is less likely to be "lost" from the system of paid work in later life." (Mitchell, Cowling and Watts 2003: 29)

Early intervention should thus become a guiding principle, with a "Gateway period" offering a range of options to test job readiness, including employment 'tasters'. This could be based on the best practice example of the 1996-97 Pre-Vocational pilots undertaken in 60 areas of Britain. These offered a range of basic skills, job preparation and team-work activities to people of all ages unemployed for more than six months. The methods used by one training and work project have been described as a world away from the job-specific training found in output-driven funding regimes (Crighton 1997).

Following periods of preparation, pre-vocational training can commence and is likely to work best where it is related to the workplace. Drawing on the experience of work trials would have the advantage of bringing employers into contact with the Guarantee initiative without either side having to commit too early. Such a programme could place job-ready people who have been registered unemployed for at least six months with an employer for three weeks. Research by White et al (1997) confirmed the effectiveness of such endeavours, reporting that the chances of securing employment at the end of trial periods increase fivefold.

Local Partnerships

A further issue concerns the condition of local labour markets. Utilising "buffer stock" employment and local partnerships, and using local government as an employer for local target groups, as advocated by the Job Guarantee proposal, provides a promising alternative to a centrally designed, controlled and executed monopoly. It also serves as a possible explanation for the success of local pilot schemes, where nation-wide programmes have failed. However, local labour market asymmetries raise concerns about the capacity of the public sector to supply all of the jobs required.

Local unemployment is sensitive to local labour market conditions. It would thus be wholly unreasonable to expect an unemployed person in Dunedin to take up public sector employment in or around Auckland, or vice versa, especially if community employment is low pay or temporary. Spatial mismatch is an issue that cannot be ignored and one that calls for localised solutions in partnership with private sector employers. A recent project in Alloa, Scotland, for example, has shown that locality-sensitive and partnership enabled solutions can be highly successful (McQuaid, Lindsay and Greig 2005). It is also an example of involvement from the private sector.

The *Alloa Initiative* was charged with implementing a local programme in partnership with Tesco, the UK's largest retail chain, in preparation for the opening of one of the company's retail superstores in Alloa in central Scotland in July 2002. The outcome of this project was the placement of 109 disadvantaged job seekers into positions at the store, and proved particularly effective at targeting the long-term unemployed and those with limited experience of the retail sector.

A genuine local partnership model was at the heart of the initiative. The *Alloa Initiative* linked the private sector employer with relevant policy actors in the Alloa and wider local areas, including: Clackmannanshire Council; Jobcentre Plus; Scottish Enterprise Forth Valley (the Local Enterprise Company); and Triage Central (a private sector organization which has led the delivery of the New Deal in the area since 1998). The Employability Training Course (ETC) was at the centre of the Initiative's approach. The ETC programme provided a range of training provision, including: team working; personal presentation; retailing skills and customer care; stock control and security; workplace health and safety; and communication skills (including written communication). In total, 184 unemployed local residents took up new jobs. The initiative's eight-week Employability Training Course (ETC) was designed to provide a route into work for local unemployed people who would not otherwise have found employment with the company. 119 individuals were recruited to the course, with 109 completing the programme and taking up work at the store. The success rates were thus impressive and represented a course completion and job entry rate of 92 per cent.

To be fair, evaluations of such small samples make generalising successes a difficult task. Equally, it may be impossible to realise private sector, large scale job guarantee programmes in New Zealand's dispersed labour market (or in other countries' labour markets for that matter), especially in rural areas. However, it is conceivable that the concept of job guarantees in a large retail chain can be replicated through "buffer stock" type employment opportunities within local government agencies *together* with pockets of guaranteed employment opportunities in private companies.

Utilising the Shadow Economy

However, despite evidence of localised partnerships and respective employment successes, the Guarantee initiative may need to go beyond 'mainstream' thinking and the usual political constraints if it is to deliver lasting results in the most excluded communities, where even "buffer stock" employment opportunities through local government agents may be difficult to realise (in terms of both, scale and scope). As such, a more controversial proposition may be warranted.

This author contends that in many of New Zealand's lowest income neighbourhoods, thriving networks of cash-in-hand trading can be found. This assertion is borne out by recent estimates (Schneider, 2007), which place the value of the hidden economy for New Zealand in 2004/05 at around 11% of GDP – an increase from 9% over the period 1990-1993 (Schneider and Enste, 2000).

In most cases this is a response to market failure. Unless people pay their neighbours what they can afford to provide childcare, the home and car repairs and other basic services, they will go without. Few people can earn enough to make a living in this way. The modest amounts of extra cash available should be distinguished from the dark end of the shadow economy characterised by drug dealers and loans sharks rather than baby-sitters and window cleaners.

The standard response of politicians is to attack benefit fraud. Government is charged with the responsibility of policing people's benefits but that should not mean the choice is restricted to work in the formal sector or full-time inactivity. Involvement in the informal economy is often the result of careful risk assessment, reflecting entrepreneurial talents and the kind of commitment, which governments and employers wish to see being incorporated

into formal education and training. It follows that the informal economy is probably too large and certainly too important to ignore.

Alternative employment support services should be given the resources – at arms-length from government – to identify the skills and half-skills developed in this part of the economy. Innovative programmes might then enable claimants to combine training with trading and develop skills, which would attract mainstream employers or sustain a new business. Whilst local governments in New Zealand will not have policy-making powers over the Department of Labour or Income Support agencies, they could negotiate a number of pilot projects to test the effect of higher disregards on claimants' earnings (providing incentives to declare activities).

This does not mean that benefit fraud is being condoned. Rather, I seek a new focus on the skills that people in New Zealand actually have, including the ones they are forced to hide. A 'skill-seeker's amnesty' on a trial basis might enable the Guarantee to reach further than it otherwise would.

Criticisms and Responses

Thus far, then, this analysis identified a number of the crucial issues for the success of a Guarantee initiative in New Zealand. However, in recognition of the plethora of sceptical commentaries it is equally important to turn our attention to some of the fundamental criticisms, which have been levied at welfare-to-work and job guarantee programmes. Mitchell, Cowling and Watts (2003) already address in some detail the accusations that a job guarantee initiative would negatively affect price stability, balance of payment, economic efficiency, work incentives and national competition principles, and we do not need to recapitulate at length.

Only a modest boost to aggregate demand is expected because the design of the Job Guarantee at a fixed wage rate sets a wage floor and does not disturb the private sector wage structure (Mitchell 1998). In a similar vein, only a modest increase in import spending is envisaged due to slightly higher disposable incomes for Guarantee participants, which will not generate any chronic external instability. As for competition and economic efficiency, the Guarantee proposal and related research provides persuasive evidence that the macroeconomic costs of unemployment dominate any realistic measure of the costs of microeconomic inefficiency (Productivity Commission, 1999). Direct macroeconomic intervention is thus justified on this basis. Finally, research has demonstrated that the Guarantee would not create disincentives to work (Mitchell and Watts 2002). Whilst it was shown that claimants would prefer benefits to Guarantee rates, the same individuals would prefer private sector employment to Guarantee job opportunities. This, in turn, justifies a balanced policy mix, in which Guarantee employment would be provided to those target groups who would then not have access to benefit payments.

In view of previous arguments, however, another area of criticism merit some renewed attention. Whilst the Guarantee proposal is based on public sector, additional employment opportunities, the present analysis already raised the concern about the required public sector capacity to absorb the likely supply of workers, especially if unemployment increases. In response, it was proposed that private sector employment could, at least in part, fill the gap. However, with the introduction of private sector employment, potential substitution, deadweight loss and displacement effects will need to be addressed. Deadweight describes

the situation where subsidised employment is used to hire people who would have been hired in any case. Substitution occurs when the subsidy displaces other workers in the employing organisation. Displacement describes the possibility that the subsidy allows the recipient organisation to undercut other providers thus causing an indirect loss of jobs (for a more formal treatment of these effects, see Lange and Shackleton 1998). In combination, the literature also refers to these effects as "churning".

Despite careful monitoring, some degree of substitution or deadweight in the private sector may be unavoidable. However, the situation is not as damning is it first appears to be. In fact, it is reasonable to assume that at least some proponents in Government circles do not much mind churning effects. The reasoning is that churning reduces the average duration of unemployment for any given aggregate level, and thereby reduces the NAIRU², on the assumption that the short-term unemployed have more effect upon wage behaviour than do long-term unemployed.

There is considerable merit in this argument but it ignores a potential political problem: the public acceptance of the proposal. There is a danger that publicity about substitution and churning will discredit the initiative in the public mind. It is for this reason that public sector employment should remain the preferred option for Guarantee jobs and that private sector employment, whilst potentially necessary to boost capacity, be used as a "top-up" only and kept to a minimum.

Ten Propositions for New Zealand

Against the above background of significant labour market complexities and various indicators of successes as well as failures, several questions emerge about how a potential New Zealand guarantee initiative could make a real and lasting difference. Without being exhaustive, the following ten propositions are suggested:

1. Persuade employers.

There is an asymmetry at the heart of the Guarantee. While the young unemployed can be forced to take part or have their benefits cut, government cannot compel employers, especially those in the private sector, to take on the target group of claimants. Employers who are sceptical about the job-readiness of the Guarantee client group are unlikely to be persuaded by this or further reductions in their non-wage labour costs. The international evidence suggests that most employers want to recruit those who already have the core skills and do not expect to share responsibility for pre-vocational training (Finn 1997). If the Guarantee is to succeed for those who are least likely to find jobs and keep them, excellent pre-vocational training programmes are needed. The Gateway zone may thus prove to be the most important part of the employability strategy. Both, private and public sector employers should be given incentives to become involved in the design of Gateway activities at an early stage. An active Gateway could offer a series of options encompassing teamwork, community volunteering, creative writing, family learning and work trials (on a part-time basis for a few weeks in the first instance). The last of these will provide a 'low risk' means of experimenting for employers as well as the claimant.

2. Include under-18s.

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² The so-called 'non-accelerating-inflation rate' of unemployment; when unemployment falls below this rate, inflation is thought to accelerate indefinitely.

The Gateway zone must also be flexible. There is now agreement in a number of countries that young people with disabilities, care leavers, young offenders and other people with multiple problems should not have to 'queue' for any considerable period before entering publicly supported employment while their chances of getting a job erode even further. This is entirely sensible. But there is a further issue about the age at which young people can receive assistance. Most governments' objective is for all 16 to 18 year olds to remain in some form of education or training. Whilst the intention is the right one, it raises the question of where and how disaffected young people should continue learning if existing provision through schools and colleges is failing them. A start would be to extend the Guarantee to under 16 year olds on a discretionary basis. This would also follow the lines of thought of the Job Guarantee proposal where eligibility for the young is aimed at all 15-19 year olds.

3. Start at School.

Even then, one is left with the question of how to provide the best services for those as young as 14 who have all but rejected formal education. It may be more productive to support their transition into the world of work – probably on a part-time basis and only if there is commitment to training. To allay fears that this amounts to 'giving up' on this group, employers could offer work experience to young people for six months or a year, and then make the offer of a longer-term job conditional on achieving agreed educational goals. The signal that is sent by a good employer might raise motivation in a way that even the most committed teacher, parent or career adviser could not.

4. Include the Private Sector.

The Job Guarantee proposal is based on truly additional, public sector enabled jobs in such areas as urban renewal projects, community and personal care, and environmental schemes and has demonstrable merits. However, some questions remain about the capacity of the public sector in New Zealand to meet the envisaged demand. Whilst 'additionality' requirements are easier to enforce in the public arena, private sector employers should nevertheless be included in the model, if only to serve as "top-up" options when there is pressure on community employment opportunities.

5. Include Part-time Options.

Whilst the Guarantee proposal already allows for part-time combinations, the importance of this point deserves re-emphasising. It would be hard to demonstrate why under a Guarantee initiative the unemployed should be required to choose between full-time education or training and full-time work. A mixed-economy approach combining part-time education and part-time employment or even a stand-alone part-time option for 12 months would provide an appealing and flexible alternative without imposing higher costs. It might also have the effect of reducing some of the gender barriers that remain in the New Zealand labour market, by preparing young men in particular for work that does not always come packaged as 'full-time'.

6. Reduce Cherry-Picking.

A number of problems have been identified in the international literature with existing, publicly funded employability schemes, not least the drive for output-related funding or even surplus generation among operators. This has created strong incentives to 'cherry-pick' the most employable who will generate more successful outcomes. It follows that the publicly supported employment and training markets have in part come to mirror existing inequalities (and perhaps made them worse) rather than reducing them. An alternative structure of incentives is needed for operators to overcome these risks. A start would be to replace short-term, empirical targets with longer-term, qualitative measures of success and link part of the

budget for agencies to clear evidence of successful job outcomes in the longer-term. Bonus payments could also be offered upon placement in the competitive labour market of those individuals with multiple labour market disadvantages.

7. Measure Added Value.

The occurrence of deadweight loss and substitution effects will need to be monitored closely to ensure added value and net employment growth. Targeting Guarantee employment opportunities primarily at the community/voluntary sector and the public sector can reduce these risks. However, the task becomes more complicated with private sector employers. Local watchdogs (including economic development departments of local government authorities and local economic development agencies) will have a role to play to ensure that funded jobs comply with 'additionality' requirements as far as possible, thus ruling out public funding for jobs which would have been on offer in the absence of the Guarantee. This is not an easy task and policy makers will need to be aware that some degree of displacement is probably unavoidable.

8. Tailor the Guarantee to Geography.

A locally sensitive approach is needed in the Guarantee. In the relatively tight local labour market of Canterbury (with low unemployment), for example, supply-side constraints may be the most important barrier to a more inclusive local economy. In other parts of the country, however, the priority may be to create or identify additional community jobs as well as tackle some of the transport difficulties, which result in exceptionally weak linkages between areas of job availability and long-term unemployment (the problem of spatial mismatch).

9. Reach into the Shadow Economy.

It would be wasteful to give up on those individuals engaged in New Zealand's economic shadowlands. The stock response that cash-in-hand trading involves unskilled workers in breaking the benefit rules misses the point. Studies in Ireland show employers more willing to recruit informal economy workers than inactive benefit claimants (Lange and McCormack 1998). Whilst governments are responsible for policing the benefit rules, alternative employment support services can get on with identifying the skills developed and maintained in the shadow economy.

10. Don't Forget Demand.

This could be the mantra of Job Guarantee advocates of how the Guarantee initiative has been designed. Despite some limited involvement by the private sector to boost capacity, the principle of demand-side intervention to create jobs for the less skilled cannot be ignored. By international standards, if the Guarantee manages to provide a platform for one-third of participants to be placed eventually in competitive employment it will have been a success. The corollary, by virtue of multiple labour market disadvantages, is that it is not unreasonable to expect some members of the target group to be unemployed again when the dedicated budget has been spent. The key question then is whether Government chooses to continuously pay them to undertake socially productive work, which the market is otherwise unlikely to perform, or return to the 'actively seeking work' requirement even where there are chronic demand side deficiencies. Policy makers, if and when they support a Guarantee initiative in New Zealand, will have to address this question sooner rather than later. The biggest challenge will be to design and pay for a programme of socially productive job opportunities in excluded communities – for as long as it is needed – and avoid the mistakes of the past.

Concluding Remarks

The intention to develop a Job Guarantee for the young (and long term unemployed) in New Zealand is, without doubt, a laudable one. Moreover, the Job Guarantee proposal provides a promising platform for adoption and further development in a New Zealand context. By drawing on the experiences in a number of other developed countries, this commentary identified some crucial factors for the success of a Guarantee proposition. In particular, it emphasised the importance of private sector involvement, albeit limited, to boost an otherwise potentially constrained public sector capacity, a well-designed partnership initiative across various policy actors, flexible and mixed approaches to full and part-time options, prevocational preparations, the need for early interventions in New Zealand's labour market, and – above all – a *long-term* policy commitment to the Guarantee.

Unless these issues are taken seriously and acted upon, the danger may re-emerge that despite good intentions the Guarantee creates little more than an environment where the participant is more than likely to be back on income support quickly and will continue, at best, to cycle on and off benefits in the long-term. In this context, Britain's Community Programme provides powerful warning signs. Despite the varied criticisms that have been identified and assessed over the years (in particular, lacking pre-vocational programmes and a lacking long-term commitment by changing governments), most of the Community Programme workers were positive about aspects of their experience and were hopeful that it would help them back into the competitive labour market. Sadly, according to respective survey analyses (Finn 1988), at the end of the programme nearly three-quarters of participants went back into the dole queue.

Notwithstanding these critical observations, this short commentary concludes with a cautiously supportive verdict on the possibility of introducing a Guarantee initiative in New Zealand. At a time when New Zealand's official unemployment rate stands proud as one of the lowest amongst OECD member states and as the Government's caseload is falling, this author believes that, based on the arguments presented, a Guarantee initiative, combined with a period of job or training preparation in a localised partnership context, will quickly reach the hardest to employ. Maintaining low levels of unemployment and tackling residual problems of joblessness are claimed to be central to the economic strategies and programmes of the major New Zealand political parties, and despite some fundamental differences in approach and philosophy, they all acknowledge the accelerating decline in well-being experienced by those without work for extended periods. A broad consensus thus exists about the necessity for special measures and new initiatives designed to alleviate the position of those worst affected by unemployment. This should be taken as a window of opportunity to target more resources on these individuals.

At a time when the two major political parties in New Zealand, as part and parcel of their 2008 election campaigns, identify youth concerns as a primary political challenge, the proposition of a Guarantee initiative is ideally placed to generate renewed political activism and, it is hoped, new ideas and a lasting policy commitment.

References

Adams, J., Grief, M and McQuaid, R.W. (2001). Are Spatially Focused Initiatives in Economics Inclusion Policies well founded? *Local Economy*. 16(3): 236-248

Brodsky, M. (2000, Oct). Public Service Employment Programs in Selected OECE Countries. *Monthly Labor Review*. 31-41

Crighton, M. (1997). *Getting People into Jobs: Training that Works*. LEPU Seminar, 21 May, London.

Finn, D. (1998). *The Community Programme and the Long-term Unemployed*. London: Unemployment Uni.

Finn, D. (1997). Working Nation, Welfare Reform and the Australian Job Compact for the Long-term Unemployed. London: Unemployment Uni.

Government of Ontario. (1992). Briefings on BC Benefits, Youth Works and Welfare-to-Work Programmes. Toronto

Government of Ontario. (1997). Guidance Notes for Ontario Works. Toronto

Higgins, J., Lange, T., Easton, B., Fargher, S., Conway, P. and Shirley, I. (2006). *Transition Assistance for Young People: A Report to the Mayors' Taskforce for Jobs*. Wellington: Mayors' Taskforce for Jobs.

Hoogvelt, A. and France, A. (2000). New Deal: The Experience and Views of Clients in one Pathfinder City (Sheffield). *Local Economy*. 15(2): 112-127

Hummeluhr, N. (1997). *Youth Guarantees in Nordic Countries*. Paris: Organisation for Economic Cooperation and Development.

Kluve, J. and Schmidt, C.M. (2002, Oct). Can Training and Employment Subsides combat European Unemployment? *Economic Policy*. 411-448

Lange, T. and McCormack, J. (1998). From New Deal to Real Deal. Edinburgh: Scottish Council Foundation.

Lange, T. and Shackleton, J.R. (1998). Active Labour Market Policies: A Critical Assessment. In T. Lange (ed.) *Unemployment in Theory and Practice*. 145-163. Cheltenham: Edward Elgar Publishing

Mayors' Taskforce for Jobs. (2007). Annual Report 2007: Employment that Works. Wellington.

McCormack, J. and Oppenheim, C. (1998). Welfare in Working Order. London: Institute for Public Policy Research.

McQuaird, R.W., Lindsay, C. and Greig, M. (2005). Job Guarantees, Employability Training and Partnerships in the Retail Sector. *Local Economy*. 20(10): 67-78

Mitchell, W.F. (1989). The Buffer Stock Employment Model and the NAIRU: The Path to Full Employment. *Journal of Economic Issues*. 32(2): 1-9

Mitchell, W.F and Watt, M. (2002). Restoring Full Employment: The Job Guarantee. In E. Carlson and W.F. Mitchell (eds.). *The Urgency of Full Employment*. 95-114. Sydney: CAER-UNSW

Mitchell, W., Cowling, S. and Watts, M. (2003). *A Community Development Job Guarantee*. Centre of Full Employment and Equity (CofEE). The University of Newcastle: Australia.

Productivity Commission. (1999). Impact of Competition Policy Reforms on Regional and Rural Australia. *Productivity Commission Inquiry Report, no.8*. Canberra

Quirk, V., Allen, E., Andresen, T., Bill, A., Cook, B., Goldsmith, B., Juniper, J., La Jeunesse, R., Mitchell, W., Myers, J., Watts, M., Welters, R. and Wrightson, G. (2006). *The Job Guarantee in Practice*. Centre of Full Employment and Equity. Working Paper no. 06-14. The University of Newcastle: Australia.

Schneider, R. and Enste, D.H. (2000). Shadow Economies: Size, Causes and Consequences. *Journal of Economic Literature*. 38(1): 77-114

Schneider, R. (2007). Shadow Economics and Corruption all over the World: New Estimates for 145 Countries. *Economics – The Open Access, Open Assessment E-Journal*. No. 2007-09: 1-47

Van Berkel, R. (1999). *Final Report of the Inclusion through Participation Project*. Political Economy Research Centre, University of Sheffield.

White, M., Lissenburgh, S and Bryson, A. (1997). *The Impact of Public Job Placing Programmes*. London: Policy Studies Institute.

Chronicle

June 2007

An article in the *Dominion Post* seemed to set the tone for June by predicting that parents, pupils and patients faced widespread disruption. The article noted that doctors and teachers were negotiating their collective agreements and the wage increases sought could be costing over \$1 billion. This put the Government in a tricky situation as, on one hand, it was under pressure to prevent industrial action but, on the other hand, the Government had to head Reserve Bank warnings against "extravagant" wage rises which would fuel inflation.

The *Press* reported that primary school principals had started a series of meetings to vote on their pay claim, estimated to be worth \$35 million. The President of the New Zealand Educational Institute (NZEI) Irene Cooper said the claim reflected the "complex and demanding role of principals" and that it would help with recruitment and retention. The principals were seeking pay increases between 5% and 18% in the first year and with 4% increases in the second and third year.

The simmering dispute between hospital orderlies, cleaners and kitchen staff and their employers continued to receive extensive media coverage with a series of articles in the *Manawatu Times*, the *Southland Times*, *NZ Herald*, and the *Timaru Herald*. The main theme was that employers had been given a reprieve from threatened strike action. The Service and Food Workers' Union (SFWU) said that the workers had cut their claim from \$16.54 to \$15.20 an hour in an attempt to reach a compromise. The union had issued rolling strike notices (see May 2007 Chronicle) and the main employer (Spotless Services), responded with lockout notices. A *Southland Times* article on 5 June suggested that a compromise was possible with SFWU spokesman Alastair Duncan saying that last-minute talks had opened sufficient space for a return to mediation. He was quoted as saying that "the latest offer is an increase of 50c on the previous rate lifting the entry level rates to \$13.60 with a top rate of \$15.60". Furthermore, the opportunity to audit the District Health Board figures was another important development.

Industrial action at Southland hospital continued with the *Southland Times* reporting that cancer patients waiting for bone scans and patients needing heart scans were amongst some of the affected patients. About 20 medical radiation technologists had taken industrial action and this had affected after-hours radiology services. However, a later article suggested that "a highly productive meeting with district health board representatives" resulted in the union radiographers deciding not to issue further strike notices.

Meanwhile, senior doctors were considering their first ever national strike with the Association of Salaried Medical Specialists (ASMS), representing about 90 per cent of senior hospital doctors issuing its first ever countrywide stop work notice. According to media reports, staffing issues had been behind several recent high-profile medical errors and doctors had raised, therefore, concerns about staffing levels and patient safety at provincial hospitals. The ASMS was quoted in the *Press* as saying that the district health boards' offer of a 3.8% pay increase over four years would not ease mounting recruitment problems.

The *Nelson Mail* reported extensively on the dispute between Air Nelson and employees represented by the Engineering, Printing and Manufacturing Union (EPMU). In early June, the paper reported that workers had gone on a four-day strike as part of the second phase of industrial action after negotiations had stalled again. Subsequently, the *Press* reported that the Employment Relations Authority (ERA) rejected an EPMU claim that Air Nelson used strikebreaking labour to load aircraft (see May 2007 Chronicle). EPMU organiser Strachan Crang said the union was disappointed with the outcome of the ERA hearing and planned to appeal the decision to the Employment Court. Air Nelson then announced that it planned to use volunteer labour to load aircraft. Predictably, there was a strong reaction from the EPMU with spokesperson Strachan Crang saying "this is Air New Zealand showing its true colours. In terms of employment it has no regard for the law and will do what it likes". However, some compromise was reached by the end of the month with the *Nelson Mail* reporting that Air Nelson workers were considering the airline's latest agreement proposal after the two parties had met.

In another dispute involving the EPMU, the *Press* reported that tension had escalated at two West Coast mines as workers voted to strike after being refused transport to the mine entrance. The 139 miners at the Spring Creek Mine, near Greymouth, and Terrace Mine, near Reefton, were due to meet to decide any further action. The union imposed a national overtime ban and rolling stoppages at Solid Energy mines after a breakdown in collective negotiations. The union was seeking a pay rise of between 5% and 5.5% while Solid Energy had offered 4%.

The *Dominion Post* reported that Wellington bus drivers employed by NZ Bus were told they could be "fired" if they talked to passengers about inappropriate topics, including their thoughts on the company or a person's appearance. In a memo to its drivers, NZ Bus said that it wanted drivers to hold general conversations on topics such as the weather, sport, hobbies and local events such as concerts. But subjects including sexual references, comments on physical appearance, talking about the bus company, or using abusive language were inappropriate. It is understood the instruction was issued after NZ Bus heard about a driver complaining about the company in front of passengers.

In an employment issue involving the police, the *Dominion Post* reported that the Police Commissioner was appealing to the Court of Appeal a former policeman's right to bring a personal grievance claim years after he resigned with a \$190,000 payout from the Police Employment Rehabilitation Fund before he could be dismissed. In 2001, a disciplinary tribunal found the former policeman guilty of 31 out of 39 charges. They included sexual harassment, throwing a file at a colleague and pepper-spraying another. He lodged a personal grievance claim in January 2003, well outside the 90-day period for filing such claims. The Employment Court found that through a misunderstanding with his lawyer, the former policeman thought his ability to claim for personal grievance was preserved when instead the time to make the claim had run out. On that background, the Employment Court allowed him to make a personal grievance claim.

Both the *Press* and the *Dominion Post* reported that the unemployment in Australia had reached a 32 year low of 4.4% and that the average weekly income for an adult in

full time work, not including overtime, was \$A1,070. But the articles went on to say that it was "not all rosy on the work front" with Australian working conditions recently coming under scrutiny by the International Labour Organisation (ILO) for ignoring international requirements to promote collective bargaining. Australia's Workplace Relations Minister, Joe Hockey, dismissed Australia's inclusion on the list as an election year stunt by the Australian Council of Trade Unions' leader, Sharon Burrow, who had lobbied the ILO to look at Australia.

An article in the *Dominion Post* claimed that, while awareness and legislation had reduced the incidence of sexual harassment, bullying had replaced it as the workplace hazard of the new millennium. The article claimed that many managers did not realise how widespread the problem was and how much human and financial costs were associated with workplace bullying. Australian psychologist Evelyn Field, who is an authority on bullying, feared that bullying was on the increase due to longer working hours, individual employment agreements and more stressful working conditions. The latest statistics from the Department of Labour showed that, in the past year, 128 cases of bullying went to mediation, which was almost three times the number of sexual harassment cases. Interesting, it was found that half of workplace bullies were women, and that 70% of their victims were female.

July 2007

The *Press* and the *Dominion Post* reported that Employment Relations (Flexible Working Hours) Amendment Bill had won the support of a parliamentary select committee strengthening the likelihood that it would be passed when it came to the final vote. The Bill had already won favour from several unions, including nurses and bank workers. However, it had alarmed Business New Zealand with Chief Executive Phil O'Reilly saying that it would cause "ludicrous outcomes". The legislation was partly drafted in response to what was seen as a culture of long working hours, with New Zealanders working an average of 1809 hours a year, compared with the average Briton who worked 1672 hours and the average German, who worked 1435 hours.

The *Nelson Mail* and the *Press* reported that union members at Air Nelson voted to accept a revised offer from their employer ending a six-week pay dispute (see May and June 2007 Chronicle). Under the settlement, union members would get a 9.5% pay rise over 30 months. An EPMU spokesman said that members had "mixed feelings" about accepting the offer as a number of new issues had come to light during the industrial action including rosters, workforce casualisation and the future use of contractors which would require future discussion with management.

The bitter dispute between service and food workers at Southland Hospital and Spotless Services appeared to be resolved with the employer "sweetening its offer" according to an article in the *Southland Times*. Spotless had agreed to meet the union's demands to pay existing and new staff \$14.25 plus penal rates.

An article in the *Press* quoted an independent health economist as saying that the quality of New Zealand's healthcare was under threat unless the Government boosted salaries. He told the *Press* the Government must intervene in long-running health sector pay disputes because employers could not afford to settle claims and the sector

was suffering. The economist also claimed that staff working in the public health system were underpaid by international standards and that New Zealand was "bleeding" well-trained medical staff overseas. A spokeswoman for Health Minister Pete Hodgson said he could not comment on the issue of health sector pay because there were ongoing negotiations.

The Waikato Times reported on a dispute involving local community group Parentline and its former Chief Executive Officer (see April Chronicle). The paper stated that the "bitterly fought and cripplingly expensive Employment Relations Authority hearing" had resumed after a three-month adjournment. The article reported that Parentline had budgeted almost a third of its total expenses for the period April to June on legal fees and there was a suggestion that it might mortgage its building to help pay the legal fees. The paper reported on the daily turn of events throughout July with accusations from both sides and a comment that the ERA adjudicator Janet Scott had "often been the real star of this soap opera".

In a rare judicial step the Sunday Star Times reported that Employment Court chief judge Graeme Colgan had essentially accused government of allowing the Employment Court's powers to be diminished with the introduction of the Employment Relations Act and its focus on mediation through the Employment Relations Authority. While the issue was technical and based around what types of cases could be heard by the Employment Relations Authority and the Employment Court, the article said that the Judge's fear appeared to be that legally complicated cases went to a non-judicial body, which may not be qualified to hear them. In a judgement Judge Colgan said "the Employment Relations Authority is a lay authority that is not presided over by judicial officers. Its members are not required to be, and many are not, qualified and trained in law". He went on further to say that the Employment Court's authority had been undermined, and said "it is ultimately for Parliament to determine where cases are to be heard as questions of access to justice. When Parliament does so again, I respectfully urge it to reconsider these issues." Auckland University associate professor of law Bill Hodge said the judge's comments were born of frustration at long-standing tensions between the Employment Court, the High Court, and the Employment Relations Authority.

The Waikato Times reported on a number of approaches that the Waikato District Health Board had taken to reduce a national \$60 million-a-year problem of sick leave amongst staff. It started by taking the view that it was a symptom of staff being tired. The board established that its sick rate was heavily influenced by the fact that many of its nurses, women working shifts, were running a household too. They were taking sick days because they were busy and tired, rather than skipping work for the sake of it. Innovations included offering roster changes, child care, budget advice, tai chi sessions, gym memberships were introduced. The board also made targeted approaches to staff taking excessive sick leave. After five years sick leave had been reduced by almost 50%.

The *Sunday Star Times* noted that Combined Trade Unions (CTU) president Ross Wilson was retiring after seven years as head of the union movement. When questioned about why more people don't join unions, Wilson claimed that there was still a very hostile employer community in the private sector and that the country was paying the price of the anti-union strategies of the 1990's. Despite the lowest

unemployment in the developed world and labour shortages in many areas, wages had failed to go up much. He claimed that it was broadly correct that unionised labour got higher wage increases than others, though this was obscured by the fact that often the wage increases were passed on to non-union people in the same area. While on opposite sides of the fence, Wilson received praise from Business New Zealand's Phil O'Reilly and Auckland Chamber of Commerce's Michael Barnett who stated that "I respect him hugely and I certainly don't see him as the enemy." On some questions he agreed with the union leader such as New Zealand shouldn't try to make low wages the basis of its ability to compete internationally. If it does, it will simply join "the race to the bottom", swapping first-world for third-world wage levels. Wilson was due to start a new role as chairman of the Accident Compensation Corporation.

August 2007

An NBR article reported that the Minimum Wage (Abolition of Age Discrimination) Amendment Bill returned to Parliament after a select committee hearing. Green MP Keith Locke said during the second reading of the Bill in Parliament that the Green Party stood alongside the country's young workers in their quest for 16 and 17-year-olds to be paid the adult minimum wage of \$11.25 per hour. He said that 16 and 17-year olds were often chosen by employers in the fast food and supermarket industries because they were in fact better at their jobs than older workers. Labour Minister Ruth Dyson said the government had raised the minimum youth rate to 80% of the minimum wage.

The Employment Relations (Flexible Working Hours) Amendment Bill continued its passage through the legislative chamber. The *Dominion Post* reported that while employers were embracing the "family friendly workplace", staff without children were worried they were being left to take up the slack without any benefits. One employee was quoted as saying that she had to work overtime to cover her colleagues' workload and while she accepted that it must be really difficult for mothers to juggle work and family "...my own work gets neglected during these times and I also have to work harder". The article quoted overseas examples where there was a growing backlash from childless employees who were concerned they were being polarised in the workplace saying that while this was not the case in NZ there was "simmering disquiet".

The *NBR* quoted lessons from the UK experience on flexible hours saying that the key for most employers would be getting the balance right between giving employees the flexibility and control that they want over the hours they work, while meeting the needs of the business. In the UK, most employers who had fallen foul of the legislation did not have a process to deal with requests. When challenged, they were unable to show they had fairly considered an employee's request or that their refusal of a request was reasonable.

Employment relations became an election campaign issue in the forthcoming Australian Federal election with Labor leader Kevin Rudd reiterating that if Labor was elected then it would phase out Australian Workplace Agreements, as well as committing to a balanced system of flexibility and fairness. Opposition Leader Kevin Rudd challenged Prime Minister John Howard to a public debate on employment

relations, just a day after Labor released its controversial policy on the issue. Mr Howard claimed the "policy is just as destructive of jobs in the small business sector as the earlier policy."

The secondary teachers' union pulled out of pay talks with the Ministry of Education, prompting fears of widespread disruption. The Post Primary Teachers' Association (PPTA) said that the offer by the Ministry of Education represented a shortfall of \$100 million over a three period, money that was needed to retain talented teachers and attract new people to a beleaguered profession. The ministry offered 3% per year for three years while the PPTA was seeking 4% and a lower level of improvements. In late August, matters got more serious with the *Press* reporting that secondary teachers were set to walk off the job in September after the membership had voted overwhelmingly (99%) in favour of strike action. The Ministry of Education sought mediation in a bid to avert a national teachers' strike.

The dispute between senior doctors and their employers simmered with reports by the *Nelson Mail* and the *Press* claiming that senior doctors appeared more likely to take national strike action after becoming angry at the release by a district health board negotiator of an 'exaggerated' statement about their pay rates (see June Chronicle). The *Press* article quoted psychiatrist Joanna Prendergast who said "there was quite a lot of heated debate about whether industrial action was the way to go ... but the overall feeling was that if we had to, we had to, for the future benefit of the medical workforce and quality of care for patients".

In the *Press*, the Association of University Staff hailed "an unprecedented increase in staff salaries over the past three years". Ratification of the latest collective pay agreement negotiated by the union meant that academics had gained an overall salary increase of up to 20% over a three-year period.

The *Dominion Post* reported that Kapiti Coast bus users faced a day of uncertainty after 40 drivers employed by Mana Coach Service who were members of the Tramways Union walked off the job for 24 hours. The remaining 100 drivers had agreed to a contract that provided for a pay increase in return for surrendering an extra week's annual leave that was available after five years' service. Tramways Union secretary Phil Griffiths said his members believed the drivers who accepted the deal had "sold them out".

A Maori Health Trust was ordered to pay a sacked doctor more than \$10,000 compensation. The *NZ Herald* reported that Dr Tane Taylor was dismissed by Raukura Hauora o Tainui in June 2006, after almost 10 years as the "face" of the trust's Health Clinic. Dr Taylor was dismissed for "actively undermining" the trust, and for being "antagonistic" and "hostile". The doctor won his claims of unjustified suspension and dismissal and was awarded lost wages, as well as \$15,000 compensation for hurt and humiliation. However, the award was reduced by a third to take into account some failures on Dr Taylor's part.

The *Southland Times* reported that Yunca Heating and Gas was unsuccessful in its challenge to a Employment Relations Authority ruling which allowed union officials to speak to union members collectively during work hours. Yunca took the Engineering Printing and Manufacturing Union (EPMU) to the Employment Court,

following a dispute between it and the EPMU (see February Chronicle). Employment Court Chief Judge Colgan who described the appeal as a test case dismissed the challenge saying that one of the principal thrusts of the Employment Relations Act was for collectivism.

The dismissal of prominent University of Auckland political scientist Paul Buchanan featured prominently. Dr Buchanan was dismissed following an email to Arab student seeking an extension to an assignment because of her father's death. The email said she was "preying on some sort of Western liberal guilt" because her father had died. Buchanan said he was unjustifiably dismissed and that he needed to be reinstated to mend damages to his reputation.

The *Waikato Times* reported the conclusion of the drawn-out Employment Relations Authority hearing between Parentline and its former CEO, 129 days after it opened (see July Chronicle). The article stated that although "the scrap has provided rich entertainment for the public, it is shameful it was allowed to get to this stage". It criticised the role of the Board saying that irrespective of the outcome the Board of Parentline should resign. The board's inability to quietly take care of business was the biggest failing and that well run organisations do not let their dirty laundry be aired in public.

In another high profile hearing, the *Dominion Post* reported that both Queen Margaret College and a terminally ill teacher who claimed his treatment at the school masked the symptoms of his cancer, claimed victory from an ERA ruling (see May Chronicle). The former teacher was awarded \$5000 compensation, but the ERA found in favour of the Wellington school on most of the alleged grievances. Authority member Rosemary Monaghan ruled that Dr Selwood had not been constructively dismissed, nor had the school acted unjustifiably.

A British survey had found that employees on high salaries were not necessarily happy with their lot. The survey by City & Guilds, one of Britain's authorities on vocational education and training, found that one-third (of a sample of 1000 people) said they were not particularly happy at work, giving a satisfaction rating of less than seven out of 10. Among those, human resources managers (2%), lawyers (4%) and secretaries (4%) scored lowest on the happiness ratings. The Happiness Index was constituted by factors that contribute to wellbeing and in the longer term could also improve productivity.

The *Dominion Post* reported that Helen Kelly had become the first woman President of the Council of Trade Unions (CTU). Other than three years teaching, Ms Kelly's entire working life had been in the union movement, across the gamut of education unions, from the Kindergarten Teachers Association and Early Childhood Workers Union to teachers' union NZEI and the Association of University Staff. She had been Vice-President of the CTU since 2003.

The *Sunday Star Times* reported on a group of labourers who were threatened with having their pay docked \$50 for spitting. Casual workers employed by NZ Labour Hire in Auckland were given notices saying that littering would cost them \$20, spitting \$50, and if they did not turn up for work for two days then they no longer had

a job. The company's operations manager Darryl Painter admitted the company did not know whether it could enforce the notices.

September 2007

A *Dominion Post* article featured the Employers and Manufacturers Association saying that an ACC "partnership" scheme should be treated with caution after meat company Affco was billed \$1 million for long-term care of a former employee. The employee was paralysed from the waist down after he was shot by mistake in a suspected gang attack in the car park of Affco's Wairoa meatworks in 2003. Under the partnership programme, Affco was responsible for work-related injury claims at its premises.

In a further development in the ongoing senior doctors' dispute with District Health Boards, the *Press* reported that senior doctors were going to ask the Government for help to resolve their bitter pay dispute (see July Chronicle). The Executive Director of the Association of Salaried Medical Specialists (ASMS) Ian Powell said that the union had resolved to go directly to the Government in an effort to avoid the otherwise inevitable escalation of the dispute, including possible industrial action. DHB lead negotiator Nigel Murray said health boards had offered a range of solutions but they had all been declined.

The secondary teachers were due to meet with the Ministry of Education in a last-ditch attempt to stave off a strike. The agreement to resume negotiations came after the teachers said that they would strike on September 12 if the government did not improve its pay offer. The ministry, which approached the Department of Labour to mediate in the pay dispute, said it was hopeful that industrial action could be averted.

Meanwhile an article in both the *Press* and the *Dominion Post* said that a \$120 million deal for 20,000 hospital nurses had been agreed, despite the nation's largest health board warning of "massive implications" for the sector. The deal gave nurses a pay rise close to 12% over three years. The New Zealand Nurses Organisation (NZNO), which had been in pay talks since March said a final response was expected any day. The Canterbury District Health Board voiced last-minute concerns over the cost of the deal and the impact on staffing requirements. A representative said the board faced a huge dilemma over how to retain nurses who were "some of the most important assets we have" while keeping within the budget.

Canterbury District Health Board maintenance workers called off a week-long strike to head back into negotiations. Around 55 technicians, electricians, fitters, carpenters, painters and gardeners were due to go on strike but voted to withdraw their strike notice after the health board signalled it was open to further negotiations. Their union, the Engineering, Printers and Manufacturing Union, said that the group was seeking a significant catch-up in pay rates of about 10% after lagging behind comparable trades for the past decade.

The *Press* reported that stationery giant OfficeMax was ordered to pay \$66,000 in compensation to eleven of its South Island sales staff for its failed bid to force through a commission scheme that would have left them out of pocket. The company was

'slated' by the Employment Relations Authority for a "fatally flawed" attempt to change the commission structure by using a consultation process the authority found to be a "sham" and done in bad faith. The dispute dated from December 2004 when OfficeMax sought to change the way sales staffs' pay was calculated which would have cut their income by between \$7,000 and \$25,000 a year. Authority member James Crighton ruled that although OfficeMax was under a duty to consider the views of staff about the plan and to operate in good faith, the staff had no reasonable opportunity to have an input.

In other industrial action, the NZ Herald reported that waterfront workers had given notice of a "potentially crippling" two-day strike at the Ports of Auckland after receiving a "goodwill" pay rise they said they didn't want. The port company's new Managing Director Jens Madsen said yesterday that the Maritime Union had notified it of a 48-hour strike by about 250 workers across its two container terminals and its general wharfs from October 2. Mr Madsen said staff had waited far too long for a pay rise since their collective agreement expired late last year, so the company had decided to start giving them the first instalment of a 3.25% increase it had offered them for each of the next three years. But union Branch President Denis Carlisle responded by saying that union members were incensed that the company paid the money into their bank accounts without their permission.

The fallout from the deal reached between the Engineering, Printing and Manufacturing Union (EPMU) and Air New Zealand continued (see January 2007 Chronicle). According to the *Dominion Post*, Air New Zealand planned to sue the EPMU for disclosing information about outsourcing of its ground handling staff that the airline claimed was confidential. EPMU's National Secretary Andrew Little said High Court proceedings were formally served against the union yesterday and he expected to be served with a personal summons today. The court documents called the union's actions in telling a parliamentary select committee about its employee contract renegotiation tactics "unconscionable and without justification". Court documents filed by the airline said it had suffered loss and damage to its relationship with its workers and to its public reputation as a result of what it called misuse of the information.

The *Dominion Post* reported that University of Otago was ordered to pay more than \$10,000 in compensation to an employee who found working with another staff member intolerable. The Employment Relations Authority found that, while Carol Fraser was not, as she claimed, unjustifiably constructively dismissed, there were actions by the university which disadvantaged her in carrying out her job. Between 1995 and 2006, Ms Fraser was employed as an administrative secretary/personal assistant in the university's physiology department. The departmental head, Dr Patricia Cragg, carried out a performance development review with Ms Fraser in August 2005 but would not address any issues related to the other employee. In her judgment, Authority member Helen Doyle said Dr Cragg's failure to follow up in terms of "obligations of trust, confidence and good" was unjustified because "it was not what a fair and reasonable employer would have done at the time". The university was required to pay \$9,000 for failing to provide a good and safe workplace and not taking reasonable steps to avoid further risk to Ms Fraser's physical or psychological health.

The NZ Herald and the Dominion Post reported that NZ Post was ordered to repay docked wages to a group of posties who staged a "secret strike" by putting mail back into post boxes. The ruling was labelled "farcical" by the National Party as it allowed workers to employ "guerrilla tactics". The Auckland posties went on the "secret strike" in July 2006 in a dispute over a new employment agreement. They went to their delivery branches and helped sort the mail in the morning, took it out on their rounds and then reposted some letters, which went back to the sorting centres and the delivery branches. As soon as NZ Post found out what they had done, it suspended their pay from the day they began the action. But the Employment Relations Authority ruled that it was illegal to backdate a suspension notice. Postal Services Chief Executive Peter Fenton told the authority it was "unconscionable" to have to described pay posties for what he as an act of

The *Press* reported that Air New Zealand has been ordered to pay over \$13,000 to a Christchurch man it wrongfully dismissed over accusations of viewing internet pornography at work. Tony Wills was also reinstated in his old job after the Employment Relations Authority ruled there was insufficient evidence to link the objectionable websites to him. He was one of five staff dismissed from Air New Zealand's warehouse operations in Christchurch in late 2004 and early 2005 for their internet usage. Mr Wills said he had not accessed any objectionable websites but was often logged on to several computers at once, meaning anyone could visit any site and it would be traced back to him.

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