

CHANGES IN WORKING HOURS FOR COUPLES, 1986 TO 2001

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Abstract

In New Zealand, the weekly hours worked by individuals have generally not been considered in the context of hours of work of other adults who may live in the same household. Using census data between 1986 and 2001, this study focuses on total hours of work for couples. The research shows that, for individual workers, while average hours of work have not changed much there has been growth in both short and long weekly hours of paid work. The increase in working hours shows up more strongly in couple data than in individual data. This reflects both an added worker effect and changes in hours worked by individuals living in couples. The data also show that individuals and couples who work the longest hours also tend to have the highest incomes. Finally, international comparative data indicates that New Zealand stands out in terms of the proportion of individuals and couples working long hours.

Introduction

As part of a wider interest in the Future of Work, the Department of Labour has been investigating work-life balance policy options. Understanding changes in working hours for both individuals and households, and the reasons behind the changes, helps in developing such policy.

In his scorecard of labour market performance at the last Labour, Employment and Work conference, David Grimmond (2003) explored some changes in work hours for individuals over recent decades. Using Household Labour Force (HLFS) data, and based on a measure of usual median hours of paid work, he showed that between 1986 and 2001 male hours stayed steady at around 41 per week, while median female hours decreased slightly from 35 to 34. In addition, the HLFS data indicated for women and men a downward trend in the proportion of individuals working under 40 hours per week, and an upward trend in those working more than 40 hours. Grimmond also undertook some preliminary analysis to determine if workers were putting in longer hours to compensate for a lack of increases in wages. He concluded that the increases in hours worked appeared to have been largely voluntary and were not a response to a lack of wage growth.

In this paper, the main focus is on changes in total working hours for couples. Again, the time period used is 1986 to 2001. However, the source of data is the census rather than the HLFS.

Why couples?

Much useful information can be obtained from analysing the work patterns of individuals. Yet, a significant proportion of adults live with other adults in households, mainly as couples. Research in a number of countries has demonstrated that there has been a growth in both "work-poor" (no job) and "work-rich" (both adults have a job) couple households amongst those in prime working ages

(OECD 1998, Gregg and Wadsworth 2002, Singley and Callister 2004). This type of measure provides a crude indication that, across society, there has been a concentration of paid employment at the household level. The concentration of paid work in couple households is linked to changes in both men and women's employment patterns, as well as being an outcome of assortative mating that brings people with like characteristics together. In the US, research has indicated that when couples are the unit of analysis, increases in employment rates by partnered women, that is adding an additional worker to the household, have led to quite dramatic increases in the total working hours of couple families. This has taken place while hours worked by individuals in the US have not changed that much (Matz and Pitt-Catsouphes 2003).

Dual-earner couples are the focus of much work-life balance research in the U.S. (e.g. Clarkberg and Moen 2001, Jacobs and Gerson 2001, Jacobs and Gornick 2001). In dual earner childrearing households, long hours of paid work may lead to parents being unable to spend sufficient time with their children. For couples without children, long hours can lead to stress and the couple having little shared time together. Yet, some of the international literature suggests that there has also been a polarisation of hours of paid work among couples, even within so-called "work-rich" couples. While a group of couples are working long hours, others are working relatively short hours, with some facing a situation of "underwork".

Previous New Zealand, Australian and US research

There has been no in-depth research in New Zealand on working hours for couples. However, an initial exploration of changes in usual working hours among New Zealand couples aged 25-59 (based on the woman's age) using census data indicated some polarisation in hours between 1986 and 1996 (Callister 2000). More

detailed research carried out in the US and Australia suggests some polarisation of hours for couples in recent decades (in Australia ABS 2003, Burbidge and Sheehan 2001, in the US Jacobs and Gerson 2001). Based on their findings, Jacobs and Gerson argue that researchers and policy makers need to focus more on work patterns in a family context rather than just focus on individuals.

Australian research indicates that education and presence of dependent children are important variables when studying the polarisation of work amongst couples between 1986 and 1996. When changes in hours worked for couples with children by qualification of husband were investigated, it was found that some polarisation of work within couples had occurred at all qualification levels (Burbidge and Sheehan 2001). However, the growth in long hours of combined work was strongest where the husband held a bachelor or postgraduate qualifications. In contrast, the short hours (under 20 hours of joint work) growth was strongest where parents had no post-school qualifications. The data also showed that the long hours of paid work were more common amongst couples without children than amongst those with them.

In summary, the US and Australian research indicate that:

- Average hours of work have not changed much for individuals, but there has been a polarisation of hours with growth in both short hours and long hours
- "Overwork" tends to show up stronger in couple data than in individual data
- The longer total hours of work in couple households has been primarily due to increases in women's employment rates
- Qualifications are important in hours of work both at the individual and household level, particularly in terms of short hours of work.
- Age and presence of dependent children are also very important
- On average women, both as individuals and when compared with their partners when living in couples, tend to work shorter hours than men
- However, women have been increasing their share of paid working hours in couples

Data and methods

In this paper changes in working hours for couples between the 1986 and 2001 Censuses of Population and Dwelling are focussed on. The censuses provide a record of usual weekly hours of paid work, with individual hours recorded. Total work hours are used in this research. That is, hours in all jobs are added together.

Age is an important variable in this research. Dealing with age for individuals is straightforward, but defining couples by age creates some conceptual challenges. In this study, couples are defined by the age of the female partner. In addition, only opposite sex couples are considered.

Data are presented on averages, as well as long and short hours of paid work. For individuals average hours could be calculated in two ways 1) average hours for all individuals including those not working 2) average hours only for those in paid work (and only those who recorded actual hours). In this paper, the latter measure is used. For calculating average hours of couples only those couples who were linked into paid work were included (that is, work poor couples were excluded). This means calculation of hours worked for employed couples includes couples where one partner was not in paid work and those with both partners in paid work.

There are some different cut-off points used by international researchers in terms of defining short and long hours for individuals. For individuals in Australia, the US and the UK, 48 hours or more per week is usually considered to be long hours. For this research, 50 or more hours per week is used. This was the cutoff point used by the Ministry of Social Development in its 2003 *Social Indicators Report*. For short hours of work for individuals under 20 hours per week of paid work is used. This used to be the cutoff point for part time work in New Zealand before it was moved to 30 hours.

When couples are concerned, there are some variations in the cutoff point used in the international literature. In Australia, Burbidge and Sheehan (2001) used 90 or more hours of combined work as an indicator of long hours, and under 20 hours of joint work as an indicator of short hours. In the US, Jacobs and Gerson (2001) used 100 hours of combined work as an indicator of long hours. In this New Zealand research, under 30 of combined work is used as an indicator of short hours. For long hours 100 or more hours is used.

In this paper, there is some exploration of the association education and incomes have with changes in hours worked for couples. In this, a broad 25-59 age group is used. In terms of income, deciles of yearly income, which includes income from all sources not just the labour market, are used. With education in couples, three groups are used: Both partners have degree or higher, neither has a qualification, and other combination of qualifications. Finally, some data are presented on how women's share of total couple working hours has changed between 1986 and 2001. Additional information on the methodology can be found in Callister (2004).

Results

Changes for individuals

To set the couple data in context, this section briefly summarises changes in work for individuals. Overall, across society average hours of paid work for those employed changed relatively little in the 15 years between 1986 and 2001. The average hours for men declined by just under half an hour, while for women the decline was just under an hour. However, there were some significantly larger declines in average hours worked amongst some age groups, notably those 15-24 and those 85 and older (although this latter group is very small). The strongest increase in average working hours

of the employed over this 15 year period was amongst women aged 45-54, with an increase of just over two hours worked per week.

However, averages disguise changes in the distribution of hours of paid work. For men aged 15 and older, in almost all 10-year age groups there was a growth between 1986 and 2001 in the proportion working under 20 hours per week as well as an increase in the proportion working 50 or more hours. For women there was a slightly different pattern of changes between 1986 and 2001. In some age groups (25-34 and 45-54) there was a decline in the proportion working less than 20 hours per week. Like men, in the 15-25 age group there was very strong growth in the proportion of employed women working short hours. In almost all age groups there was an increase in the proportion of women working 50 or more hours per week. Much of this growth in long hours for men and women took place between 1986 and 1996 and, in fact, plateaued or even declined for some groups of men in the subsequent five years. Given that men are over-represented amongst those working long hours, this led to an overall plateauing of the proportion of all workers putting in long hours between 1996 and 2001. However, going against this overall trend, for other groups, notably women aged 25-34, 45-54 and 55-64, there was continuing growth in the proportion working long hours between 1996 and 2001.

International comparative data on long working hours show that New Zealand is at the high end of hours worked amongst industrialised countries. In a comparison of the proportion of employees working 50 or more hours per week in selected OECD countries on, or near, the year 2000, Messenger (2004) found that only Japan topped New Zealand in the long hours league.

In New Zealand, when education and hours of work for men aged 25-59 were considered, there was little difference in average hours by level of formal education in both 1986 and 2001. For these men, while there was growth amongst all educational groups in the proportion working under 20 hours per week, in 2001 such work was more common amongst those with no formal qualifications. A stronger pattern in relation to education emerges for prime working aged women. Well-educated

women showed the strongest increase in working hours over the 1986 to 2001 period.

Finally, in line with Grimmond's findings when personal income was considered, in both 1986 and 2001, the data show that for prime working aged men and women there was a strong relationship between decile of personal yearly income and weekly working hours. However, this relationship became stronger between 1986 and 2001. In 2001 those individuals working the longest hours generally had the highest income.

Couples

To set the context of changing hours within employed couples, in the age range 15-54 between 1986 and 2001 there was a decline in the proportion of couples where one or both worked (that is, there was an increase in the proportion of work-poor couples), but in the same time period, there was an increase in employed couples in the 55-84 age groups (that is, a decline in work-poor couples). The increase in couples where at least one partner was employed was particularly strong in the 55-64 age group.

Changes in average total hours for couples provides some initial guide to the direction of change in work hours. Table 1 shows changes in total average combined hours worked by couples in 1986 through to 2001. Included in this particular table are also average hours for the intermediate censuses of 1991 and 1996. These additional data show that in most age groups there was not a marked variation from a trend over the whole time period. This was despite some significant growth in the proportion of work poor couples from 1986 to 1991 (Singley and Callister 2004). In the age groups where the changes in average hours worked for couples were the strongest, the trend was a gradual increase in the total average hours worked between each census. Overall, Table 1 shows that average hours for couples in the broad age group 25-84 increased, with the strongest growth in couples where the female partner was aged 25-34, 45-54, or 55-64. While these patterns primarily reflect changes in women's employment rates, they also are influenced by changes in working hours for some individuals.

Table 1: Average combined hours worked per week for employed couples by age of female partner, 1986 to 2001

Age of female	1986	1991	1996	2001	Change 86-01
15-24	69.7	69.6	70.8	68.7	-1.0
25-34	64.7	66.1	69.2	70.4	5.7
35-44	70.5	71.4	72.1	72.4	1.9
45-54	67.5	69.3	73.1	76.0	8.6
55-64	52.7	53.0	56.5	62.1	9.4
65-74	37.2	38.1	33.6	38.9	1.8
75-84	33.7	36.2	29.8	34.1	0.4
85 and over	54.8	45.3	32.4	34.5	-20.4
Total	65.8	67.1	69.1	70.4	4.6

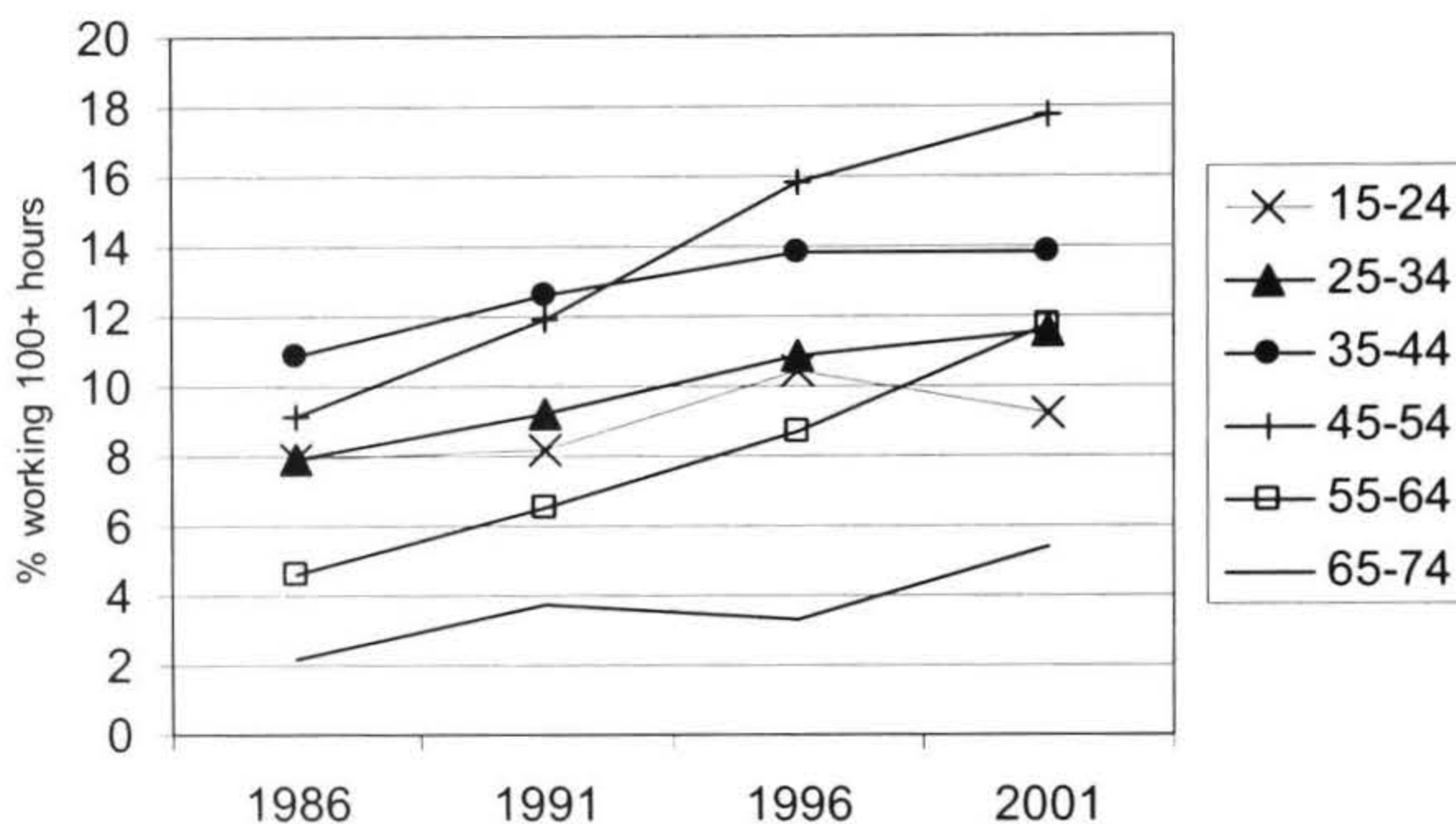
When individual combined hours are considered, a number of key trends show up. These include:

- In all age groups there has been a decline in the 40-45 hour peak of combined hours. This primarily reflects the decline in couples where there was just one full-time worker. Where hours for couples increased, this has often been due to an “added worker” effect.
- In the 25-24, and 55 through to 84 age groups there has been an increase in the 80-85 hour peak. This primarily reflects the increasing numbers of couples in these age groups where both work 40 hour weeks.

- In the 10 year groups within the broad 25-54 age span, the 80-85 hours of combined work peak is now larger than the 40-45 hour peak.

While many couples work around 80 hours of combined work per week, there has also been growth in longer combined hours. Figure 1 shows when changes in the proportion of couples working 100 or more hours per week occurred across the four census periods. It indicates that growth in the long end of the working hours spectrum for couples took place throughout the whole period for those aged 45-54, 55-64 and, to a lesser degree, 25-34. Again, this primarily reflects changes in women’s patterns of work rather than men’s.

Figure 1: Proportion of employed couples working 100 or more hours of combined work per week in each age group, by age of female partner, 1986 to 2001



While in each age group single people and couples without dependent children are more likely to work long hours than couples with dependent children, in 2001 there was still a significant number of couples with dependent children who worked long hours. In the broad 15-54 age group, in 2001 there were 35 thousand couples without children who worked 100 or more hours per week, but 32 thousand with children. Within the group with children, longer combined hours tend to be worked by couples where the youngest child was in their teenage years.

While there are relatively few couples where the 100 or more hours of combined work comes from both partners working 50 or more hours per week, when women’s hours are considered, in 2001 men were more likely to work long hours if their partner also worked these hours. For example, in the 25-34 age group, in couples where the female partner worked zero hours (i.e. was either unemployed or not in the labour force) 37 percent of the male partners worked 50 or more hours per week. In those couples where the female partner worked 50 or more hours, 59 percent of their male partners did

likewise. At the other end of the prime working age spectrum, the 55-64 age group, the figures were 26 and 67 percent. This undermines the idea that long hours are generally worked by one partner to compensate for short hours by the other.

Table 2 explores the association of education with changes in working hours among couples aged 25-59. It shows that, in both 1986 and 2001, it was the well-qualified couples that worked the longest average hours. In addition, while there was an increase in average hours worked in all educational combinations, the slowest growth was amongst couples with no formal qualifications. These trends link into occupational data, where it has been found that long hours of work are particularly common in managerial and professional occupations. However, other data show that while well-educated couples on average work longer hours they are only marginally over-represented amongst those working very long hours (Callister 2004). Again, this may link to occupational patterns, with relatively unqualified groups such as farmers or fishers working very long hours.

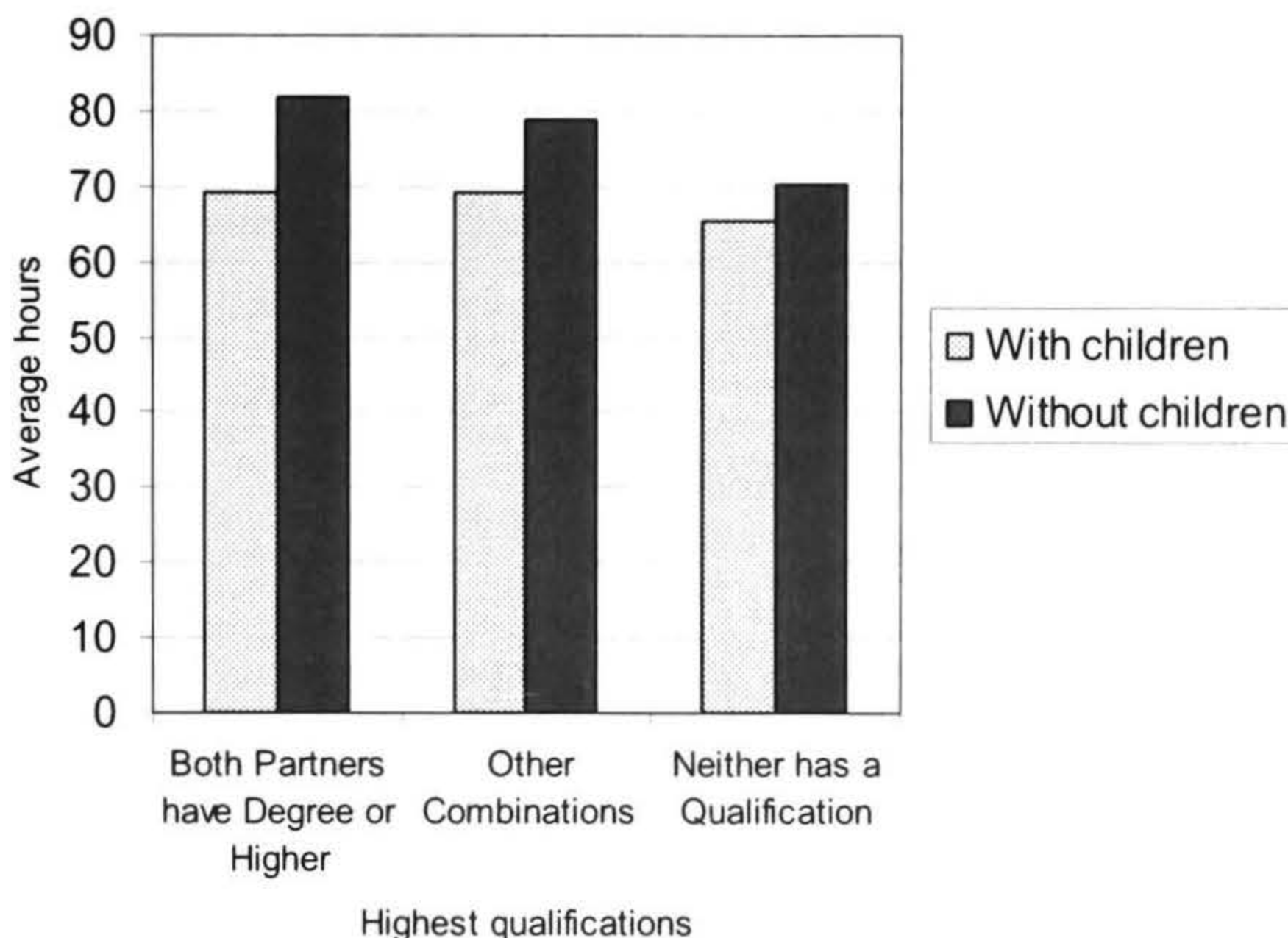
Table 2: Average hours worked per week by employed couples in each highest qualification gained category – Women aged 25-59, 1986 and 2001

Qualifications of Couple	1986	2001	Change 86-01
Both Partners have Degree or Higher	68.9	74.3	5.4
Other Combination of Qualifications	67.0	73.2	6.2
Neither has a Qualification	65.9	68.3	2.4
Total	66.7	72.7	6.0

While having children is associated with a reduction in total hours worked by couples, the reduction is highest amongst those couples with higher qualifications. Yet, overall, in 2001 well-educated couples with children on

average worked longer hours than childrearing couples with no formal qualifications and almost the same average hours as non-childrearing couples with no formal qualifications. These patterns are illustrated in Figure 2.

Figure 2: Average weekly hours of paid work for employed couples in each highest education category and whether they have dependent children – Women aged 25-59, 2001



In terms of yearly couple income, in 2001 there was an overall (although not even) gradient in average total weekly hours worked by couples, with the longest

hours tending to be put in by the couples with the highest yearly income (Table 3). This gradient became more pronounced in 2001 than it was in 1986.

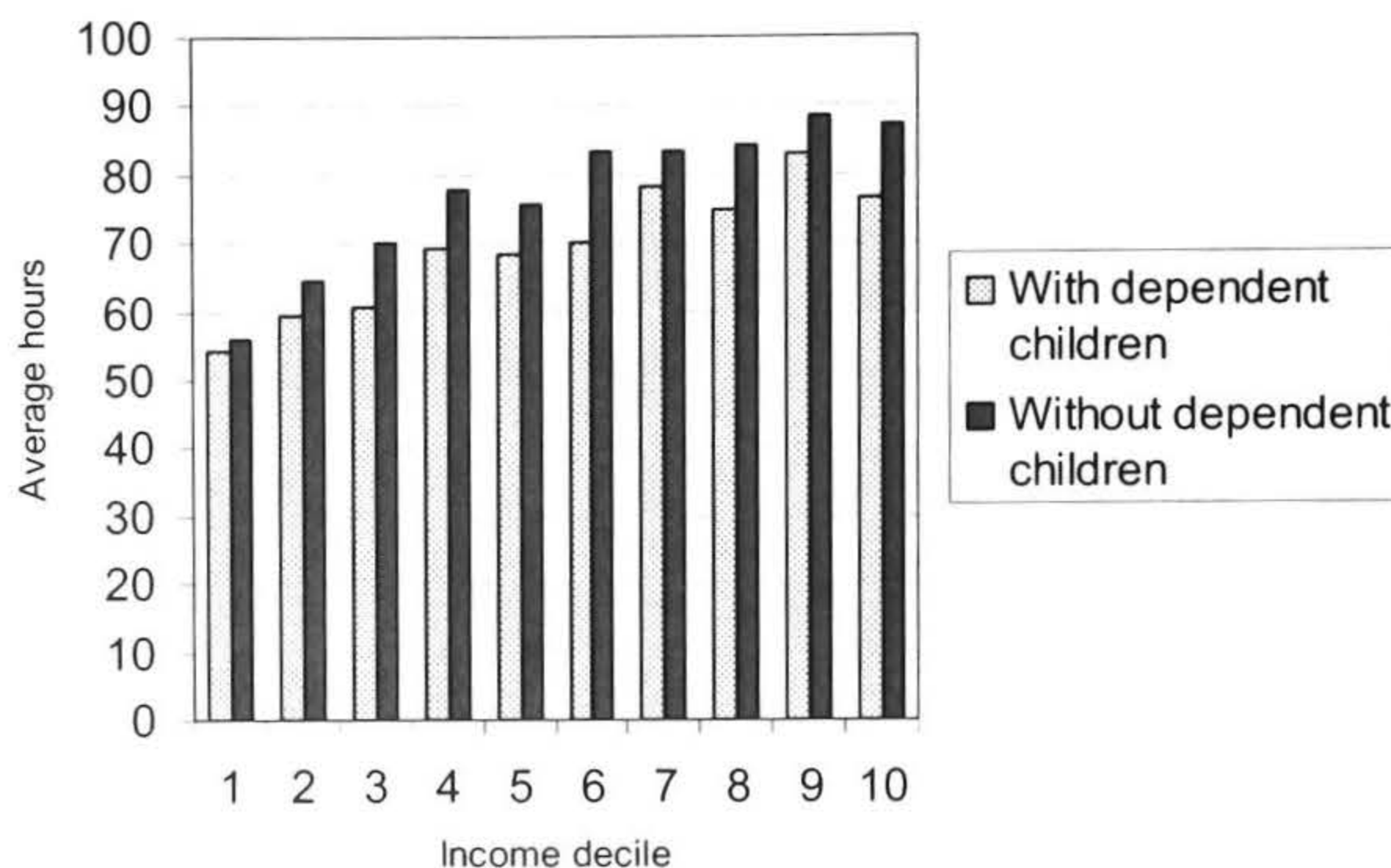
Table 3: Average hours worked per week by employed couples in each decile of couple income – Women aged 25-59, 1986 and 2001

Income Decile	1986	2001	Change 86-01
1	61.4	55.2	-6.1
2	55.6	61.0	5.4
3	65.0	67.1	2.1
4	58.2	70.0	11.8
5	65.8	70.7	4.9
6	70.2	78.6	8.4
7	68.2	81.3	13.1
8	75.9	79.2	3.2
9	76.3	85.9	9.6
10	78.5	81.4	2.9
Total	67.5	73.0	5.5

Figure 3 shows just 2001 data. It illustrates the association of yearly income and having dependent children with average weekly working hours of couples. In a similar, and no doubt linked, pattern to that of education, in 2001 the gap between average hours worked

by high-income couples (both with and without children) was relatively large compared with low-income couples. Having dependent children reduces average hours worked in all deciles, but by the least amount in the bottom decile of income.

Figure 3: Average total hours of employed couples in each decile of income for those with and without children – Women aged 25-59, 2001



While the data does not rule out the idea that a group of poorly educated, low income earning couples may be being forced to work long hours due to economic necessity, the largest increase in average hours worked appears to have come about within the higher educated and, generally, higher income couples.

Women's hours as a proportion of total working hours for couples were then considered. The increasing employment of partnered women, as well as the higher proportion of women working long hours, was likely to lead to women working a higher proportion of hours within couples. This is confirmed by the data. There was an overall shift in the distribution worked by women relative to men in couples where the female partner was

aged 25-59. One measure of this shift is where women work half or more of the hours in the couple. In 1986 just under 20 percent of women in prime working aged couples contributed half or more of the hours work. By 2001 this had risen to 28 percent.

Finally, while international comparisons always need to be treated with some caution due to methodological problems, Table 4 compares average combined hours worked for couples across a number of industrialised countries. The table also compares the number of couples where both partners were employed. Like the international data for individuals, New Zealand stands out in terms of hours worked for couples.

Table 4: Joint average hours of paid work for non-agricultural employed married couples aged 25-59, selected industrial nations

Country and year	Average hours worked per week- All working couples	% dual earners	Average hours for dual earners
US (1997)	72	76	81
New Zealand (2001 & 1996)	71 (70)	74 (72)	81 (80)
Finland (1991)	70	81	77
Canada (1994)	65	66	77
Sweden (1995)	64	85	69
Belgium (1996)	64	58	79
France (1994)	62	61	76
Germany (1994)	60	56	75
Italy (1995)	59	46	78
UK (1995)	57	55	74
Netherlands (1994)	52	52	64

Note: The source of all non-New Zealand data is Jacobs and Gornick (2001). There are some differences in how the data were calculated between countries. The main one is that in some countries, including New Zealand, both defacto and married couples are included. In all countries the couples included are those where at least one partner was in paid work. In New Zealand, agricultural workers -ANZSIC Industry - Agriculture, Forestry and Fishing - were removed from the calculation to make the data internationally comparable. In addition, both partners needed to be in the 25-59 age group.. Finally, the New Zealand and international data is rounded to the nearest hour or percentage.

Conclusions

Not surprisingly, most of the trends in hours of paid work for individuals and couples already found in countries such as the UK, the US and Australia can be seen in New Zealand data. However, New Zealand appears to be at the high end of the spectrum internationally when long weekly hours of work are considered for both individuals and couples.

Census data do not give a definitive answer as to whether the increasing hours for some groups of New Zealanders are due to economic necessity rather than choice. However, they do lend support to the preliminary analysis that Grimmond undertook to determine if individual workers were putting in longer hours to compensate for a lack of increases in wages. His conclusion that the increases in hours worked appear to have been largely voluntary and were not a response to a lack of wage growth seems also to be largely correct when couples are the unit of analysis. Yet, some of the increasing employment rates and hours put in by women in couples is likely to be linked to poor labour market prospects for a group of low skill, low income men, and a subsequent need to raise couple income. The potential variation in reasons why couples might be working long hours presents major challenges for those policy makers trying to develop strategies to reduce working hours that are deemed to be excessive.

Future research

Primarily descriptive data generally raise as many questions as they answer and this paper is no exception. While a more complex census based multivariate analysis of the changes in working hours for couples might provide a better understanding of why hours have been changing, a better understanding is likely to come from different data sources. While there is an expanding international literature on the working hours preferences of individuals, in most countries, including New Zealand, we do not know what the total combined working hour preferences of couples are. The Ministry of Social Development has carried out some exploratory work on preferences of individuals living in couples in New Zealand out, but the research involved a relatively small sample size and had a low response rate (Ministry of Social Development forthcoming). Despite these drawbacks, hopefully researchers outside of MSD will eventually gain access to these data.

Time use data can also be used to study couples. For a significant number of couples in the New Zealand time use dataset there is information available on both partners. These couple data have yet to be used by

researchers. Issues such as joint patterns of both paid and unpaid work could be explored, as well as the gender division of paid and unpaid work within households. This, in turn, would assist our understanding of inequalities in hours of employment and earnings between women and men.

Researchers also need to better understand how bargaining takes place within couples, for example how joint retirement decisions are made, and what influences decisions about working hours when couples have dependent children. This will require new sources of data.

Finally, in 2004 the Labour Department and Statistics New Zealand have been developing a new supplement to the Household Labour Force Survey that will include questions on satisfaction with working arrangements and preferences for working hours. While full data may not be able to be collected for both partners in couples, this new supplement should, nevertheless, provide some useful additional couple level data.

Notes

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