Women, men and the new economics of partnering in New Zealand: A research note

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Abstract
New Zealand census data from 1981 to 2006 indicate that holding formal qualifications, especially degrees or higher, and being partnered are associated with higher personal and household incomes for men and women aged 30–44. Those men and women aged 30-44 with no formal qualifications have faced real income declines. However, unlike in the United States (US), income growth in New Zealand has been poor even for the well educated. In the US, the existence of well-educated couples both earning good incomes has led to very strong growth in inflation-adjusted incomes for these households, but this is not a pattern we have seen in New Zealand. Women are contributing a greater proportion of household incomes, but instead of seeing significant household income gains from their additional earnings, in New Zealand we are seeing inflation-adjusted household incomes remaining flat.

Introduction

In early 2010, the US Pew Research Center published *Women, Men and the New Economics of Marriage* (Fry and Cohn, 2010). The research was based on census data and demonstrated important changes for mid-life Americans (men and women aged 30–44). Against a background of declining rates of marriage and significant relative shifts in educational and employment outcomes for individual men and women, the researchers identified important trends. In particular, they showed that when the typical mid-life male married in 1970 he did not gain another breadwinner in his household, but when he married in 2007 he did. This provided the partnered males with increased household earning power that most unmarried men did not have. Noting the overall importance that educational attainment has in relation to a wide range of outcomes, the researchers demonstrated that the higher a person's educational level, the more the individual's household income had risen. In addition, within each educational level, married adults had experienced larger income gains than unmarried adults.

New Zealand studies have tracked long-term changes in education, employment, partnering and, albeit to a lesser degree, income earning of mid-life men and women.[1] Research shows that educational levels for both women and men have increased, but overall mid-life women are now better educated than mid-life men (Newell, 2009). Overall rates of employment for men aged 30–44 years have declined, and this decline has been strongest for those with no formal educational qualifications (Callister and Rea, 2010). In contrast, the employment rates of mid-life women have increased strongly over recent decades.

In a similar pattern to that in the US, long-term census data indicate that mid-life men and women are also less likely to be partnered, with men more likely than women to live alone and women more likely to live as a sole parent (Callister and Rea, 2010). Again, education is associated with differing living arrangements, with those with no formal qualifications less likely to be partnered.

Changes in employment for men and women also flows through to household employment patterns. For mid-life couples, census data from 1981 to 2006 show that the proportion of couples with both partners in paid work has increased. While well below the peak of the 1991 census data, the proportion where neither partner was employed had also increased (Callister et al, 2010). In part, this is due to mating patterns, where well-educated people exhibit a tendency to partner with similarly well-educated people, and, if partnered, the poorly educated have poorly educated partners (Callister and Didham, forthcoming).[2]

In relation to New Zealand incomes, earlier census-based research showed much volatility, but overall little growth, in inflation-adjusted personal yearly median incomes for men aged 30–34 between 1976 and 2001 (Callister, 2006). Women aged 30–34 experienced real personal median income growth across the whole period, but their incomes were still lower than those of men in 2001. As a result of the changes in personal incomes for these men and women, along with changes in size and structure of households, real household incomes for both men and women were also volatile from 1976 to 2001. However, overall, real household incomes grew slightly for both women and men aged 30-34 from 1976 to 2001. The gap between men's and women's household incomes was also smaller lower than the gap between their personal incomes, suggesting the growth in women's incomes had helped to stabilise household incomes. Finally, in a comparison of income growth for men and women on both sides of the Tasman, researchers point to slower overall growth for New Zealanders but with the poorest growth felt most by middle-aged men (Coleman and McDonald, 2010). Yet, there continues to be an income gap between women and men.

New Zealand research has tended to focus on one or two variables at a time. In contrast, *Women, Men and the New Economics of Marriage* (Fry and Cohn, 2010)

[1] New Zealand studies tend to focus on wider measures of partnering than just legal marriage.
[2] The data also show that those with higher levels of formal education are more likely to live in couples than those with no formal qualifications.

considered partnering, education, gender, income and, to some degree, employment together. While the various strands of New Zealand research suggest the patterns seen in the US will have been repeated in New Zealand, this paper specifically explores changes in both personal and household incomes by education and living arrangement between 1981 and 2006 for mid-life men and women.

Our data

As in the US study, our research uses census data. Similarly, our focus is on outcomes for men and women aged 30–44. Like the Americans, we selected this age range as it is during these ages that traditionally men and women have completed their tertiary education, if any and, in the not too distant past, were generally married, the men employed and the couple raising children.

Mirroring the US study, our data set is also restricted to:

- people born in New Zealand, although their spouse may have been born overseas
- people aged 30–44, although their partner may be outside this age range
- partnerships defined by people recording that they reside together in the same household.

In this study, we focus on both average personal income and average household income. We calculate real income (that is, inflation-adjusted income) using 2006 as the reference point.[3] It is recognised that in using averages a significant level of within-group income inequality will be disguised. It is also recognised that equivalising income (that is, adjusting household income to reflect the number of people being supported in the household), may give different results. However, the overall direction of trends is likely to be similar.

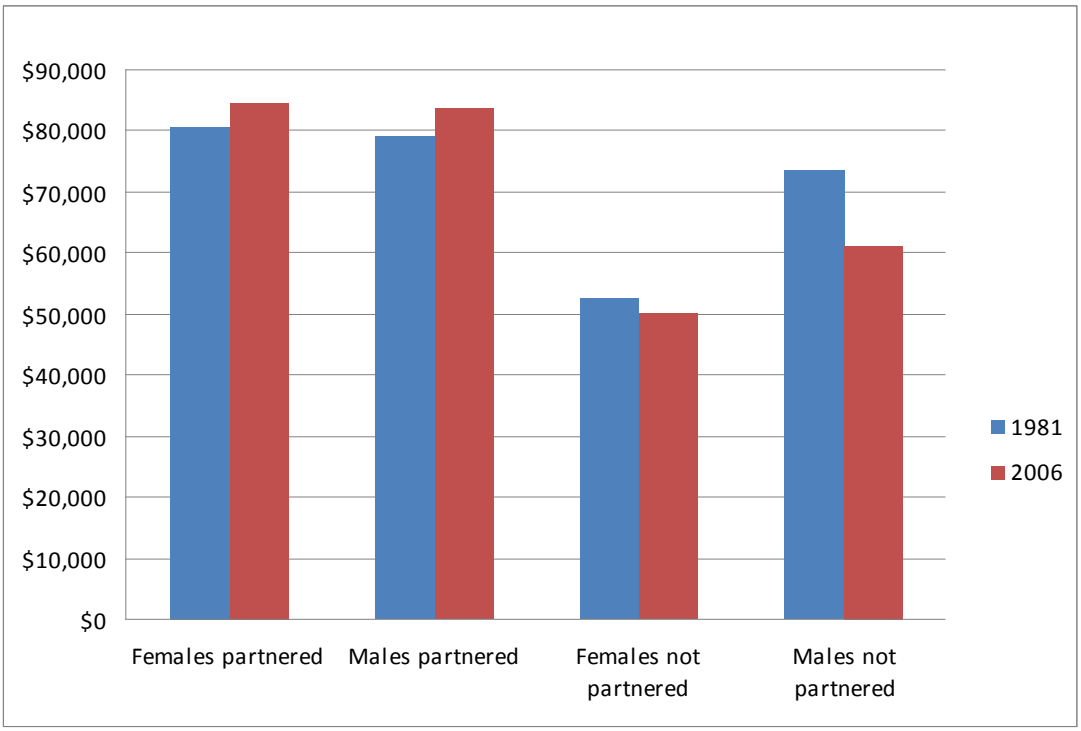
Results

At a broad level, the trends taking place in the US have also been seen in New Zealand. Figure 1 shows inflation-adjusted average annual household income for men and women aged 30–44 in 1981 and 2006 in relation to whether they were partnered or not. As in the US, in New Zealand over this period household income grew for both men and women who were partnered. In addition, in both years partnered individuals had higher household incomes than non-partnered individuals. In one sense, this is not surprising given the greater opportunity two individuals have to earn more than one income. However, it is surprising that partnered women's household income was marginally higher than that of partnered men in both years. This reflects male incomes as much as female incomes and links to partnering patterns by men and women. In contrast, inflation-adjusted household incomes for the unpartnered men and women declined over this period. The incomes for unpartnered women started lower than those of men, but experienced a smaller

[3] We use the Reserve Bank of New Zealand's calculator based on the Consumers Price Index series to calculate inflation-adjusted incomes, see www.rbnz.govt.nz/statistics/0135595.html.

decline. Unpartnered inflation-adjusted average male household income declined more, but was still higher than that for women in 2006.

Figure 1: Inflation-adjusted mean annual household income for New Zealand born men and women aged 30–44 by whether they were non-partnered, 2006 dollars, 1981 and 2006



The US research indicated that underlying these broad trends were complex patterns of education that affected both personal income and household income. The next section disaggregates some of the changes indicated in Figure 1. It also shows detailed changes over time so the effect of economic cycles can be assessed.

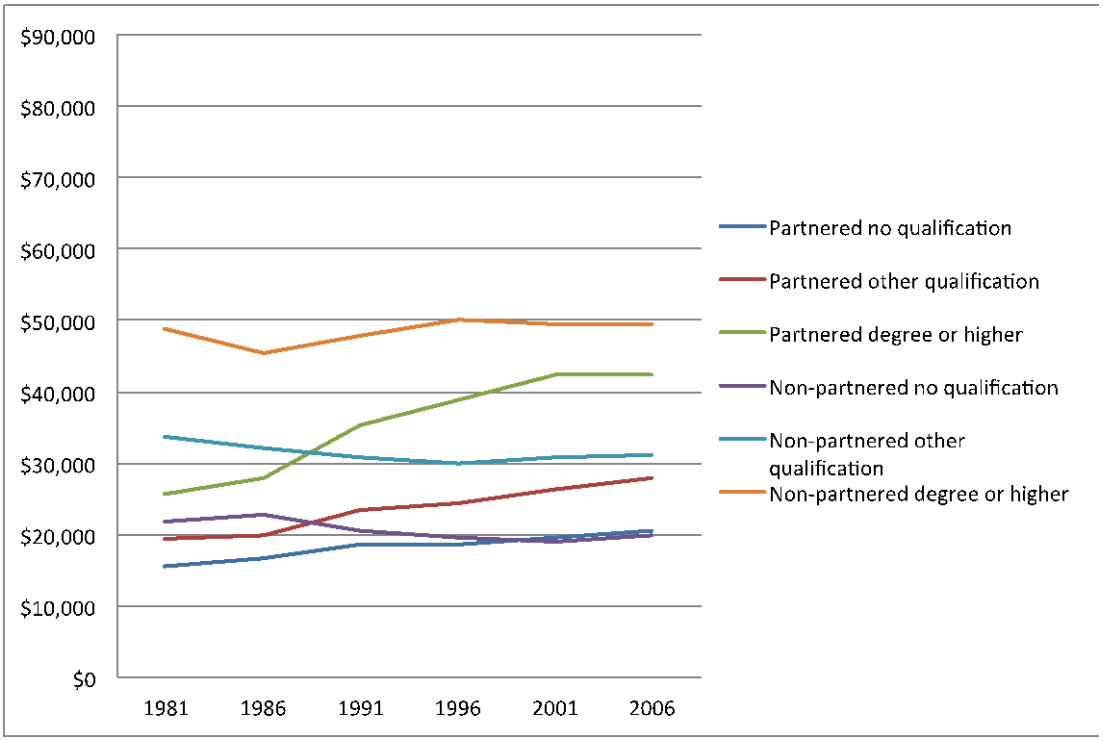
Personal income

Figure 2 shows inflation-adjusted personal average income for women aged 30–44 from 1981 to 2006. Historically, the highest incomes have been earned by non-partnered women with degrees or higher qualifications. This continued throughout the whole period. In part, this is likely to reflect that many of these women do not have children. The period began with non-partnered women with other qualifications having the next highest average income, but ended with partnered women with degrees or higher qualifications taking this position. This likely reflects the strong growth in employment of qualified partnered mothers with dependent children over this period.

With the exception of partnered women with degrees and those with other qualifications, there was little growth or slight decreases in real incomes for most categories of women shown in Figure 2. However, given the increasing proportion of women with degree or higher-level qualifications and increasing overall employment

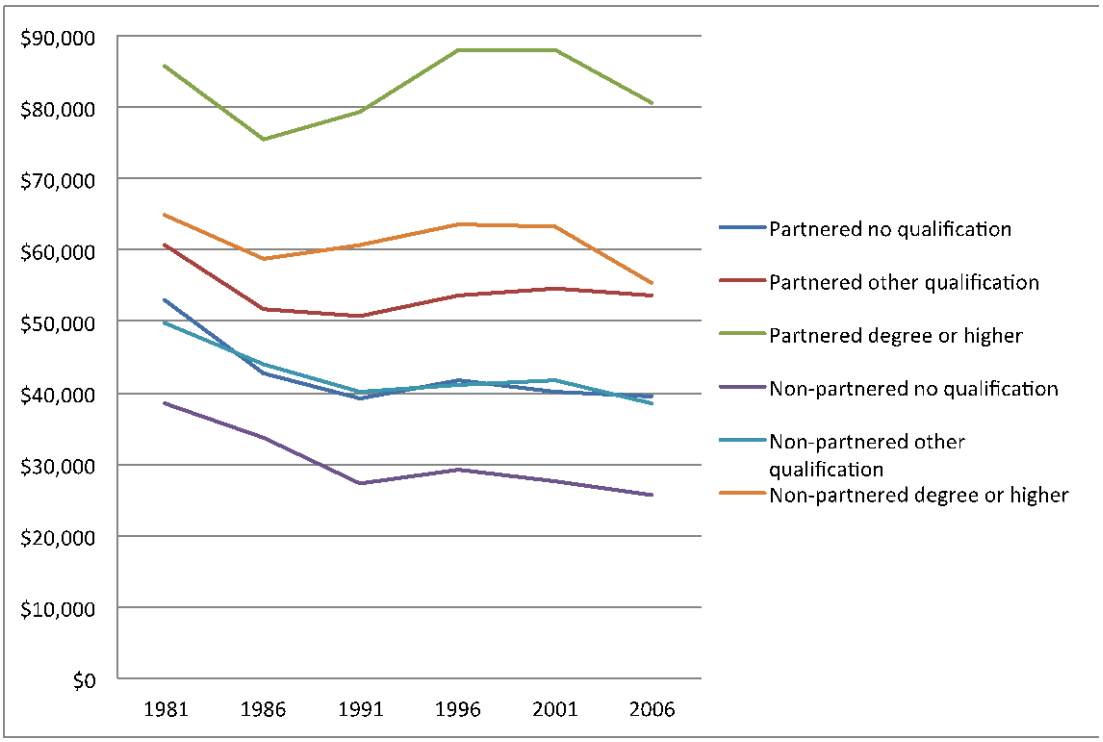
among women, average inflation-adjusted incomes for women aged 30–44 increased from $17,463 for partnered women in 1981 to $29,885 in 2006 (in 2006 dollars). For unpartnered women, the increase was from $27,488 to $31,694 (see the Appendix, Table 2 for underlying data for all years).

Figure 2: Inflation-adjusted mean annual personal income from all sources for New Zealand born women aged 30–44 in each qualification and partnering status, 2006 dollars, 1981–2006



Male incomes have been more volatile, but there was no overall growth in inflation-adjusted personal incomes for males in all partnering and qualification combinations (Figure 3). Overall, throughout the whole period, men in each group had higher personal incomes than women. However, the gap decreased because of declines in some male income, especially among those with no formal qualifications. Mean or average inflation-adjusted annual incomes for both partnered and unpartnered males aged 30–44 declined from 1981 to 2006. For unpartnered males, this decline was from $44,599 to $36,670. For partnered males, the decline was smaller from $58,836 to $55,446 (see the Appendix, Table 2). Not surprisingly, given the use of the same data source, these patterns of decline in inflation-adjusted incomes are very much in line with the findings of Coleman and McDonald (2010).

Figure 3: Inflation-adjusted mean annual personal income from all sources for New Zealand born men aged 30–44 in each qualification and partnering status, 2006 dollars, 1981–2006



Household income

The analysis now turns back to household income. Although household income was volatile over the period, Figures 4 and 5 show reasonably similar patterns for women and men. Real household incomes for both partnered men and women who held degrees or higher qualifications grew slightly overall. In contrast, household income for both women and men who were not partnered and held no formal qualifications declined significantly (see the Appendix, Table 3 for underlying data for all years).

Figure 4: Inflation-adjusted mean annual household income from all sources for New Zealand born women aged 30–44 in each qualification and partnering status, 2006 dollars, 1981–2006

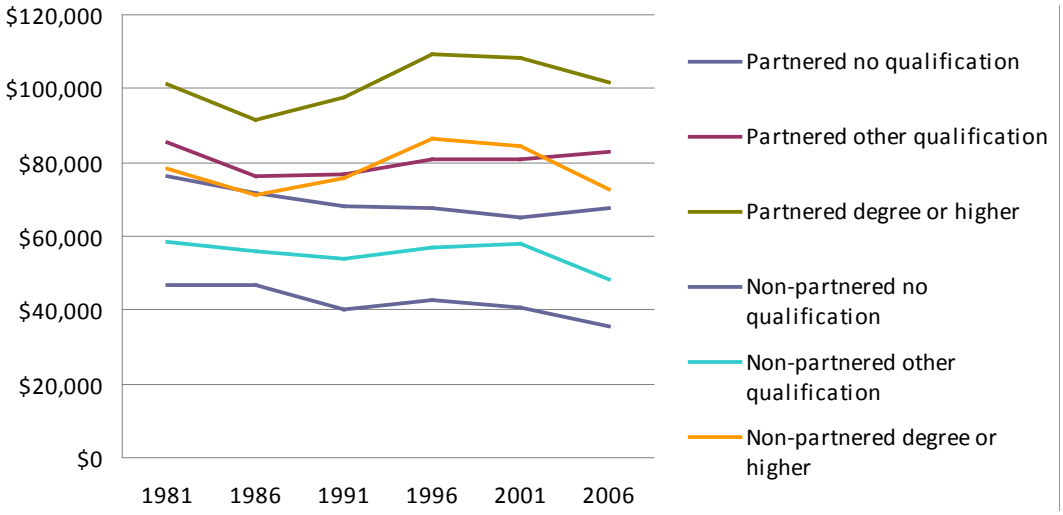
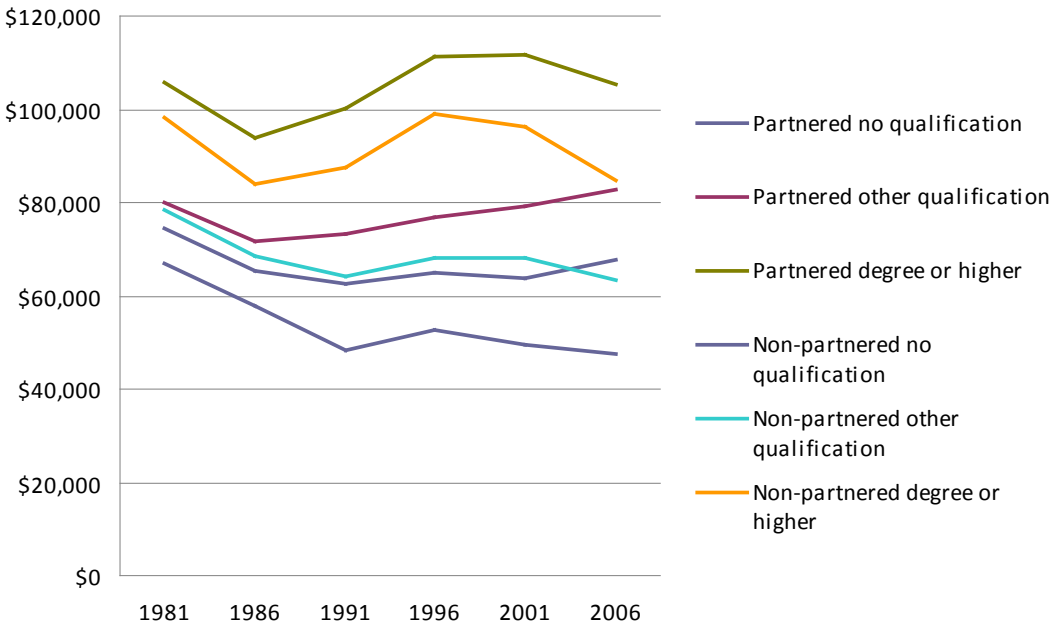


Figure 5: Mean annual household income from all sources for New Zealand born men aged 30–44 in each qualification and partnering status, 2006 dollars, 1981–2006



Comparison of trends in the United States and New Zealand

Table 1 compares trends in New Zealand and the US. However, the data for countries are difficult to compare because:

- the New Zealand data are means, US data are medians
- the New Zealand household income data are not equivalised, US data are equivalised

- the New Zealand data are for partnered and non-partnered people, but the US data are for married and non-married people
- New Zealand and the US use different education scales.

Nevertheless, a comparison gives some idea of the direction of trends in both countries.

Table 1: Comparison of inflation-adjusted household income growth for men and women in each partnering and education group in New Zealand and the United States

Partnering and education category	New Zealand inflation-adjusted household income growth 1981–2006 (%)	United States (US) inflation-adjusted household income growth 1980–2007 (%)
Married/partnered women		
US less than high school, New Zealand no qualifications	-10.7	-12.1
US high school graduate		2.5
US some college		8.2
New Zealand other qualifications	-3.2	
US college graduate		29.6
New Zealand degree or higher	0.7	
Married/partnered men		
US less than high school, New Zealand no qualifications	-8.7	-0.7
US high school graduate		10.7
US some college		21.6
New Zealand other qualifications	3.4	
US college graduate		40.8
New Zealand degree or higher	-0.3	
Not married/not partnered women		
US less than high school, New Zealand no qualifications	-23.5	3.7
US high school graduate		-0.4
US some college		3.9
New Zealand other qualifications	-17.3	
US college graduate		27.8
New Zealand degree or higher	-7.0	
Not married/not partnered men		
US less than high school, New Zealand no qualifications	-28.7	-9.2
US high school graduate		-11.4
US some college		0.7
New Zealand other qualifications	-19.5	
US college graduate		19.6
New Zealand degree or higher	-13.7	

Three patterns stand out from Table 1.

- In both countries there have been declines or very low growth in household income for those with no formal qualifications.
- In both countries, non-partnered males with no formal educational qualifications have seen their inflation-adjusted household incomes decline the most.
- In contrast to New Zealand, the well educated in the US have experienced strong household income growth.

It is difficult to assess why some US–New Zealand patterns are similar and why some are so different. But the data do reinforce a lack of inflation-adjusted income for most men and women in New Zealand over recent decades despite a considerable growth in educational attainment. Although overall income inequalities increased over this period (Perry, 2010), just based on this average income data, at first sight the inequalities appear not to be strongly along educational dimensions.

Conclusion

New Zealand census data from 1981 to 2006 indicate that, as in the US, holding formal qualifications, especially degrees or higher, and being partnered are associated with higher personal and household incomes. In both countries, people with no formal qualifications have experienced declining inflation-adjusted incomes. But income growth in New Zealand has been poor even among the well educated. In the US, well-educated couples earning two good incomes has led to strong growth in household incomes for this group, but this is not a pattern in New Zealand. Women are increasingly contributing to household incomes, or perhaps have become the main income earner. But instead of seeing significant household gains from their additional incomes, we are seeing overall incomes declining due to changes in male incomes.

Appendix: Average inflation adjusted yearly income from all sources

Table 2: Personal average inflation adjusted yearly income from all sources for women and men, 2006 dollars, 1981–2006

Females aged 30–44, 2006 dollars

	1981 $	**1986 $**	**1991 $**	**1996 $**	**2001 $**	**2006 $**
Partnered						
Overall	17,463	18,985	22,691	24,316	26,995	29,885
No qualifications	15,610	16,758	18,736	18,783	19,558	20,730
Other qualifications	19,461	19,934	23,412	24,608	26,282	27,970
Degree or higher	25,731	28,006	35,474	38,769	42,311	42,534
Non-partnered						
Overall	27,488	28,646	27,821	28,852	29,692	31,694
No qualifications	21,969	22,841	20,459	19,715	19,052	19,842
Other qualifications	33,673	32,067	30,829	30,037	30,769	31,215
Degree or higher	48,989	45,476	47,912	50,275	49,637	49,497

Males aged 30–44, 2006 dollars

	1981 $	**1986 $**	**1991 $**	**1996 $**	**2001 $**	**2006 $**
Partnered						
Overall	58,836	51,037	50,496	55,481	58,866	55,446
No qualifications	52,913	42,832	39,257	41,789	40,325	39,455
Other qualifications	60,848	51,795	50,700	53,634	54,680	53,611
Degree or higher	85,958	75,452	79,488	88,191	88,082	80,725
Non-partnered						
Overall	44,599	41,176	36,880	39,578	46,226	36,670
No qualifications	38,559	33,769	27,309	29,425	27,760	25,590
Other qualifications	49,915	44,129	40,080	41,227	41,699	38,571
Degree or higher	65,021	58,873	60,655	63,680	63,355	55,444

Table 3: Household average inflation adjusted yearly income from all sources form women and men, 2006 dollars, 1981–2006

Females 30–44, 2006 dollars

	1981 $	**1986 $**	**1991 $**	**1996 $**	**2001 $**	**2006 $**
Partnered						
Overall	80,731	75,029	75,539	80,303	81,452	84,696
No qualifications	76,026	71,672	68,050	67,643	64,844	67,858
Other qualifications	85,511	76,079	76,906	81,007	80,822	82,802
Degree or higher	100,969	91,482	97,819	109,250	108,209	101,715
Non partnered						
Overall	52,633	52,925	50,068	55,838	56,463	50,149
No qualifications	46,593	47,016	40,036	42,499	40,610	35,632
Other qualifications	58,694	55,929	54,001	57,046	57,776	48,557
Degree or higher	78,208	71,438	75,650	86,288	84,375	72,713

Males 30–44, 2006 dollars

	1981 $	**1986 $**	**1991 $**	**1996 $**	**2001 $**	**2006 $**
Partnered						
Overall	79,237	71,950	73,375	76,732	80,669	83,968
No qualifications	74,326	65,271	62,598	64,801	63,721	67,883
Other qualifications	79,862	71,804	73,219	76,686	79,219	82,588
Degree or higher	105,756	93,990	100,293	111,309	111,851	105,461
Non-partnered						
Overall	73,694	65,715	60,362	66,531	65,005	61,463
No qualifications	66,820	57,821	48,429	52,807	49,384	47,667
Other qualifications	78,492	68,615	64,319	68,103	68,233	63,203
Degree or higher	98,403	84,056	87,588	99,118	96,346	84,943

References

Callister, P (2006) Are New Zealanders heading for older age richer, better educated and more likely to be employed? In J Boston and J Davey (eds) *Implications of Population Ageing: Opportunities and risks.* Wellington: Institute of Policy Studies.

Callister, P, and Didham, R (forthcoming) The 'meet market': A research update. *New Zealand Population Review*.

Callister, P. and Rea, D. (2010) *Why are a Group of mid-life Men on the Margins of Work and Family?* A literature review, IPS Working Paper 10/13, Wellington, Institute of Policy Studies.

Callister, P, von Randow, M, Rea, D, and Cotterell, G (2010) *Changes in Paid Work for Mid-Life Couples between 1981 and 2006: A research note.* IPS Working paper 10/01, Wellington: Institute of Policy Studies.

Coleman, A, and McDonald, H (2010) *"No country for old men": A note on the trans-Tasman income divide*. Working paper 10-08. Wellington: Motu Economic and Public Policy Research. www.motu.org.nz/index.php?/publications/detail/no_country_for_old_men/

Fry, R, and Cohn, D (2010) *Women, Men and the New Economics of Marriage*. Washington DC: Pew Research Center. pewsocialtrends.org/files/2010/10/new-economics-of-marriage.pdf

Newell, J. (2009) *A Comparison of New Zealand and Australian Labour Markets: Current Similarities and Long Term Trends,* MERA working paper 2009/02. Wellington: MERA.

Perry, B (2010) *Household Incomes in New Zealand: Trends in indicators of inequality and hardship 1982 to 2009*. Wellington: Ministry of Social Development. www.msd.govt.nz/about-msd-and-our-work/publications-resources/monitoring/household-incomes/index.html

Reserve Bank of New Zealand (no date) *New Zealand Inflation Calculator.* www.rbnz.govt.nz/statistics/0135595.html.