

# Returns to education in Australia 2006-2016

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## Acronyms

HILDA            Household Income Labour Dynamics of Australia survey

## Introduction

In this paper, we estimate and compare the returns to education in Australia using standard Mincer equations for the years 2006, 2011, and 2016. Data used for the analysis is the most recently released Household Income and Labour Dynamics of Australia (HILDA) survey (version 16). In addition, we also examine whether the family background in which an individual grows up may affect his/her earning.

The rest of the document is as follows. We first describe the approach, and then describe the data. We then present and discuss the results, and then make some conclusions. The Full results are presented in an Appendix.

## The approach

Standard earning and wage equations are estimated using the formula:

$$y_i = \alpha + \gamma_1 Tedu_i + \gamma_2 Vedu_i + \gamma_3 Ledu_i + \beta_1 age_i + \beta_2 age_i^2 + X_i' \theta + \varepsilon_i, \quad (1)$$

where

- the left hand-side variable  $y_i$  is either log weekly earnings or log hourly wage of individual  $i$ ;
- $Tedu_i$  (higher education),  $Vedu_i$  (vocational education), and  $Ledu_i$  (less than Year 12) are dummies for individual's education attainments. The reference group (left out) is Year 12 graduates. Thus, the coefficients  $\gamma_1$ ,  $\gamma_2$ , and  $\gamma_3$  are the earning/wage premiums of the corresponding education level relative to Year 12 graduates. For example,  $\gamma_1$  means an individual who receives higher education would earn  $100 * \gamma_1\%$  more than a Year 12 graduate, everything else being equal.
- $age_i$  and its square represent individuals' experiences, and their coefficients jointly determine the effect of age;
- $X_i$  is a group of social demographic variables including own occupation, Indigenous status, marital status, regions, occupations of individuals' father and mother, and an indicator of whether the individual is from a lone parent household at the age of 14. We use parents' occupations and the indicator of growing in a single parent household to proxy individuals' family background. The full results from these control variables are shown in the appendix.

Equation (1) is estimated with OLS separately for men and women and for each year of 2006, 2011, and 2016. The list of variables is in Table A of the Appendix.

## The Data

The data are extracted from Waves 2006, 2011, and 2016 of the HILDA Survey. From the sample of each wave, we select workers who are between 25 and 64. We exclude self-employed workers because their earnings are unstable, students because they haven't reached their highest qualification yet, and those with health conditions as we don't expect their earnings to follow a normal pattern. Sample statistics of the key variables are presented in Table 1. The weekly earnings of female workers are much lower than male workers, but the differentials in hourly wage are not as big as the earnings. This is because many women work only part time. The distributions of the male

and female workers are a bit different. Most men received vocational education (over 40%), while the largest group of women received higher education. More women than men receive an education of less than Year 12, but this difference is reducing over time, to only a 1 percentage point difference in 2016 (from a 5 percentage point difference in 2006).

**Table 1. Sample statistics of the key variables**

Variables	2006		2011		2016	
	Male	Female	Male	Female	Male	Female
Weekly earnings	\$1,197	\$762	\$1,544	\$986	\$1,686	\$1,122
Hourly wage	\$27.6	\$23.5	\$35.6	\$30.3	\$39.2	\$33.9
Higher Education	27%	33%	30%	38%	30%	42%
Vocational Education	41%	26%	41%	29%	42%	32%
Year 12	10%	14%	12%	12%	14%	11%
Less than Year 12	22%	27%	17%	21%	14%	15%
Age	42 years	42 years	43 years	43 years	42 years	43 years
No. of obs.	2,079	2,078	2,815	2,746	2,984	2,873

To see the wage and earning differentials across different education levels, we present the average wage and earnings at each education level in Table 2. The raw differences of earnings and wages across educational levels are very clear, with those of the individuals with higher education much higher than the rest and those of the ones who did not finish Year 12 the lowest.

The problem with this simple analysis of income by education level is that it doesn't take into account other factors such as age differences, where people live (wages in capital cities are usually higher than outside the capital city), indigenous status, occupation differences, family background, etc. For example, if higher educated graduates have different occupations, or live in different areas where wages are higher, then this may account for the wage differential, rather than the education itself. Controlling for these effects using a regression equation, as outlined above, can provide the impact of an education in isolation from other influences on wages.

**Table 2 Weekly earnings and hourly wages by education levels**

	2006		2011		2016	
	Male	Female	Male	Female	Male	Female
	Weekly earnings (\$)					
Higher Education	1,565	1,026	2,005	1,277	2,182	1,428
Vocational Education	1,129	673	1,446	839	1,569	944
Year 12	1,129	679	1,323	905	1,397	933
Education < Year 12	905	563	1,134	711	1,242	789
	Hourly wage (\$)					
Higher Education	35.4	29.5	46.3	36.7	50.6	40.9
Vocational Education	25.6	21.6	32.9	27.1	36.2	29.6
Year 12	27.8	21.2	30.1	26.8	32.9	30.0
Education < Year 12	21.7	19.3	26.9	25.2	29.8	26.1

## Results

In Tables 3 and 4, we present the earning and wage premiums of various education levels relative to Year 12 graduates, after age, occupation, indigenous status, marital status, where the person lives (capital city/balance of state), and whether they lived in a lone parent household at age 14. Table 3 is for all workers and Table 4 is for full time workers only. We prefer to measure the returns to education using a wage premium. This is to tease out the influence of the labour supply effects. A wage premium is calculated based on hourly wages whereas an earnings premium is calculated based on weekly earnings.

In the tables, we have shown t statistics in parentheses, and then tests of significance based on these t statistics using stars, a standard approach in econometrics. Three stars means the variable has a statistically significant relationship with wages or earnings in our model at the 1% level (so we are 99% confident of the relationship); two stars means the relationship is significant at the 5% level (so we are 95% confident of the relationship); and one star means the relationship is significant at the 10% level (so we are 90% confident of the relationship). No stars means the relationship is not significant.

A few points to make:

- Relative to Year 12, the returns to higher education are highly significant for both males and females. In terms of weekly earnings, the premium for males is between 15% to 22%. However, this variation is largely due to change of hours over the years. When we look at the full-time workers only or hourly wage, the premium is quite constant over time at about 20%. For females, the wage premium is around 15%.
- The negative wage premium for not finishing Year 12 is also highly significant. For males, it is about -10%. For females, it averages about -8% over the three periods.

- The returns to vocational education (compared to completing Year 12) is mostly insignificant for both male and female workers, which means that in terms of wage, receiving vocational education does not have any advantage over finishing Year 12.

**Table 3. Earning and wage premiums**

Education	2006		2011		2016	
	Male	Female	Male	Female	Male	Female
Wage premiums relative to Year 12 graduates						
Higher Education	19.3%*** (5.09)	15.4%*** (5.28)	20.0%*** (6.75)	12.0%*** (4.48)	18.8%*** (7.08)	13.1%*** (5.25)
Vocational Education	2.7% (0.79)	-1.7% (-0.58)	2.6% (0.95)	0.4% (0.15)	2.1% (0.89)	-1.8% (-0.75)
Education < Year 12	-9.0%** (-2.37)	-6.2%** (-2.24)	-7.6%** (-2.45)	-7.7%*** (-2.78)	-9.6%*** (-3.33)	-10.9%*** (-4.00)
Earning premiums relative to Year 12 graduates						
Higher Education	21.5%*** (4.69)	19.0%*** (4.09)	15.0%*** (4.24)	12.4%*** (3.04)	14.6%*** (4.21)	17.3%*** (4.37)
Vocational Education	9.4%** (2.24)	-5.8% (-1.33)	3.9% (1.21)	-2.9% (-0.74)	3.3% (1.06)	3.6% (0.95)
Education < Year 12	-5.2% (-1.12)	-13.7%*** (-3.10)	-9.8%*** (-2.65)	-13.9%*** (-3.30)	-10.4%*** (-2.76)	-8.9%** (-2.06)

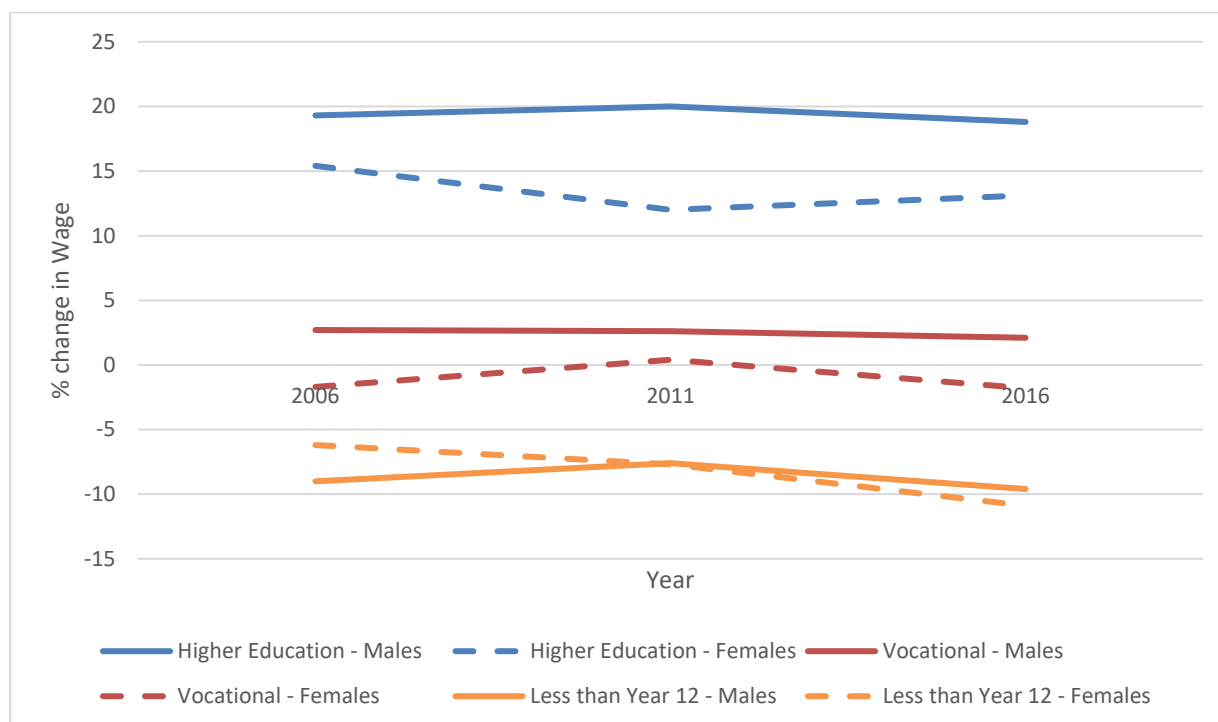
t statistics in parentheses, \* p<0.10, \*\* p<0.05, \*\*\* p<0.01

Figure 1 shows these returns to education for each education level, year and gender. This graph clearly shows that Male returns to education are higher than Female; but there hasn't been a large change over the last ten years. Any variability in estimates for each year is potentially due to the sampling error in the survey. We conducted simple t-tests for the estimates of the returns to education being the same across the years (ignoring the correlations between them which results from the fact that they are obtained from the same longitudinal sample), and the results show that they are not significantly different.<sup>1</sup>

<sup>1</sup> The t test assumes independent samples. In this case, we know that the samples taken in each year are not independent as the survey is longitudinal. However, testing for a significant difference knowing the samples are not independent is difficult given the data we have. The best we can do with the data we have is a t test, violating the assumption of independence of the samples.



**Figure 1. Wage premiums, All Workers**



**Table 4. Earning and wage premiums (full time workers only)**

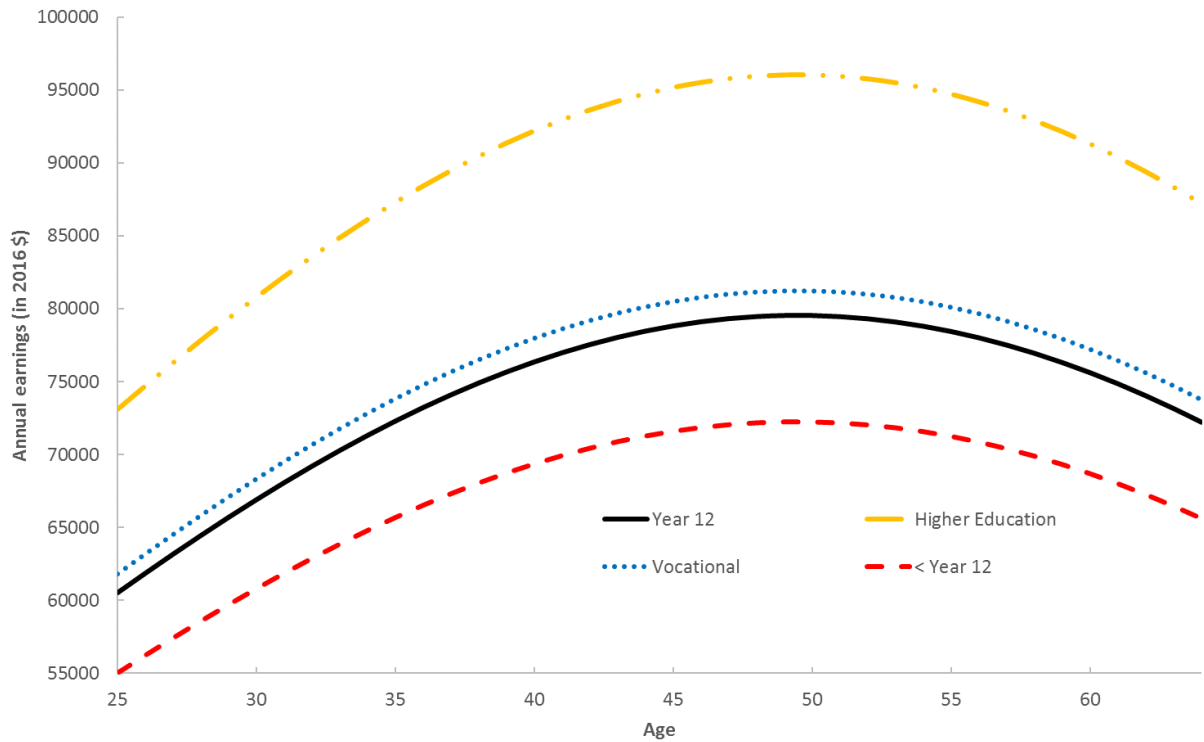
Education	2006		2011		2016	
	Male	Female	Male	Female	Male	Female
Wage premiums relative to Year 12 graduates						
Higher Education	21.7%*** (5.92)	15.4%*** (5.28)	20.8%*** (7.07)	12.5%*** (3.98)	19.7%*** (7.27)	14.6%*** (4.76)
Vocational Education	3.6% (1.06)	-1.7% (-0.58)	2.1% (0.78)	-0.6% (-0.19)	1.1% (0.46)	-2.4% (-0.79)
Education < Year 12	-10.3%*** (-2.76)	-6.2%** (-2.24)	-8.3%*** (-2.64)	-5.9%* (-1.68)	-9.3%*** (-3.12)	-11.5%*** (-3.25)
Earning premiums relative to Year 12 graduates						
Higher Education	22.8%*** (5.96)	17.1%*** (4.86)	20.5%*** (6.49)	13.5%*** (4.15)	20.7%*** (7.24)	15.3%*** (4.85)
Vocational Education	4.7% (1.33)	-2.5% (-0.75)	3.2% (1.12)	-2.3% (-0.71)	3.7% (1.46)	-2.3% (-0.75)
Education < Year 12	-11.2%*** (-2.88)	-7.8%** (-2.18)	-8.6%** (-2.55)	-8.4%** (-2.31)	-8.1%** (-2.57)	-12.7%*** (-3.50)

t statistics in parentheses, \* p<0.05, \*\* p<0.01, \*\*\* p<0.001

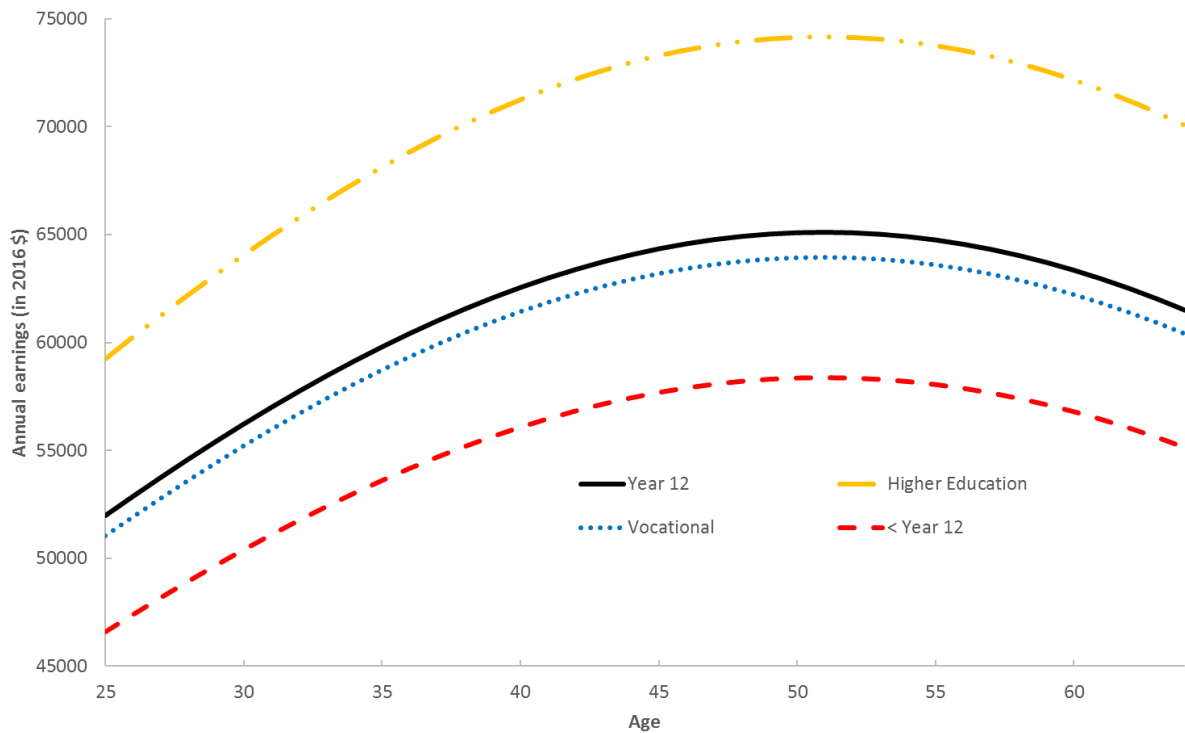
To illustrate the return for the whole life time, we have then calculated a lifetime earnings profile from the model and plotted these in Figures 2 (Males) and 3 (Females) for a few otherwise identical individuals except for their educational levels, assuming they always work full-time. This analysis has calculated the estimated earnings by age for each education level, using the estimated equation (1), and then plotted these estimated values. The age-earning profiles are typical inverse U-shaped. It is quite clear that for both males and females, the earnings of Year 12 graduates and of those receiving

vocational education are similar, but those with higher education are much higher, and those who do not complete Year 12 are lower. The peak earning age for all groups is about 50.

**Figure 2. Lifetime Earning profiles of male workers with different education levels**



**Figure 3. Lifetime Earning profiles of female workers with different education levels**



In Table 5, we present the impacts of the family background on hourly wages. From our results, we see that by and large the coefficients of these variables are not significant (except some isolated evidence that parents' occupation may affect workers wage), which suggests that the family background in which one grows up in does not have much of a direct impact on individual's wages.

**Table 5. Coefficients of family background variables in the Wage equation**

Variables	2006		2011		2016	
	Male	Female	Male	Female	Male	Female
Living in a lone parent household at the age of 14	0.031 (0.93)	-0.006 (-0.23)	0.030 (1.11)	0.011 (0.44)	0.025 (1.06)	-0.005 (-0.25)
Father's occupation: managers or professionals	-0.001 (-0.03)	0.013 (0.68)	0.004 (0.24)	0.029* (1.74)	-0.020 (-1.18)	0.017 (1.09)
Father's occupation: labourer	-0.039 (-1.16)	0.001 (0.05)	-0.003 (-0.10)	-0.008 (-0.29)	-0.037 (-1.40)	-0.034 (-1.36)
Father's occupation: missing or not worked	-0.022 (-0.46)	0.008 (0.19)	-0.029 (-0.83)	-0.010 (-0.28)	-0.060* (-1.83)	0.040 (1.36)
Mother's occupation: managers or professionals	0.022 (0.80)	-0.012 (-0.57)	0.024 (1.10)	0.034* (1.73)	0.011 (0.59)	0.025 (1.50)
Mother's occupation: labourers	0.015 (0.49)	-0.091*** (-3.60)	-0.004 (-0.17)	-0.061** (-2.51)	0.010 (0.39)	0.029 (1.28)
Mother's occupation: missing or not worked	-0.004 (-0.14)	-0.047** (-2.11)	-0.044** (-2.10)	-0.007 (-0.33)	-0.007 (-0.38)	0.004 (0.19)

t statistics in parentheses, \* p<0.10, \*\* p<0.05, \*\*\* p<0.01

In Table 6, we show the results for the individual measures in the wage equation, after accounting for the impact of education and family background. Age is significantly associated with wage; Indigenous isn't; being married is, but the effect is lower for females compared to males; both male and female managers and professionals have higher wages compared to other intermediate occupations, whereas associate professionals and machinery operators and drivers do not have a significantly different wage; and labourers have a significantly lower wage than people working in other intermediate occupations.

**Table 6. Coefficients of individual variables in the Wage equation**

Variables	2006		2011		2016	
	Males	Females	Males	Females	Males	Females
Age	0.0366***	0.0187***	0.039***	0.024***	0.045***	0.034***
Age Squared	-0.0004***	-0.0002**	-0.0004***	-0.0002***	-0.0005**	-0.0003***
Indigenous Status	0.041	0.049	-0.038	0.047	-0.000	0.095*
Marital Status	0.123***	0.072***	0.096***	0.060***	0.101**	0.033**
Occupation: Managers	0.208***	0.187***	0.249***	0.227***	0.277**	0.270***
Occupation: Professionals	0.180***	0.232***	0.252***	0.273***	0.243**	0.240***
Occupation: Associate Professionals	0.058*	-0.012	0.105***	-0.037	0.132**	-0.073**
Occupation: machinery operators and drivers	-0.018	-0.043	-0.008	-0.036	0.017	-0.099
Occupation: Labourers	-0.197***	-0.154***	-0.155***	-0.131***	-0.147**	-0.143***

The results of the full models are listed in Tables B-E in the Appendix. Estimates for each Capital City/Balance of State are not provided in this table for conciseness, but are available on request. The results are consistent with national and international literature.

## Conclusions

- Returns to education (especially in terms of the wage premium) remain stable between 2006 and 2016 in Australia. Everything else being equal, the wage premiums for higher education (relative to Year 12) for male and female workers are about 20% and 15 %, respectively. The negative wage premiums of not finishing Year 12 are about -10% and -8%, respectively for males and females. There is no premium for vocational education.
- The family background factors that we could measure did not seem to have a significant impact on individuals' wages, although there is some weak evidence that parents' occupation may have a small impact on wages.
- Other factors that have an impact on wages include age; whether the person is married; and some occupations. Indigenous status had no impact on wage after accounting for all other variables.

## APPENDIX – FULL RESULTS FROM THE MODELS

**Table A Variable list**

Variable	Explanation
<i>learning</i>	Log weekly earning (current price)
<i>lwage</i>	Log hourly wage (current price)
<i>age, age2</i>	Age in years and its squared
<i>Tedu</i>	1= higher education
<i>Vedu</i>	1=vocational education
<i>Y12</i>	1=Year 12 graduate (reference group, not included in the estimation)
<i>Ledu</i>	1=Year 12 not finished
<i>Indigenous</i>	Indicator for Indigenous status
<i>married</i>	Indicator: married or in a de facto relation
<i>occup_m</i>	Occupation: 1= managers
<i>occup_p</i>	Occupation: 1= professionals
<i>occup_ap</i>	Occupation: 1= associate professionals
<i>occup_i</i>	Occupation: 1= machinery operators and drivers
<i>occup_l</i>	Occupation: 1= labourers
<i>occup_o</i>	Occupation: 1= other (intermediate occupations, reference group, not included in the estimation)
<i>lone14</i>	Indicator: living in a lone parent household at the age of 14
<i>f_occup_mp</i>	Father's occupation: managers or professionals
<i>f_occup_l</i>	Father's occupation: labourers
<i>f_occup_n</i>	Father's occupation: missing or not worked
<i>f_occup_ind</i>	Father's occupation: other (intermediate occupations, reference group, not included in the estimation)
<i>m_occup_mp</i>	mother's occupation: managers or professionals
<i>m_occup_l</i>	mother's occupation: labourers
<i>m_occup_n</i>	mother's occupation: missing or not worked
<i>m_occup_ind</i>	mother's occupation: other (intermediate occupations, reference group, not included in the estimation)
Regional dummies	Indicators of capital cities and balance of States are also included in the regressions, the reference group is Sydney

Table B Estimation results of the wage equation (full sample)

Variables	2006		2011		2016	
	Males	Females	males	females	males	females
<i>age</i>	0.036***	0.0187***	0.039***	0.024***	0.045***	0.034***
<i>age2</i>	-0.0004***	-0.0002**	-0.0004***	-0.0002***	-0.0005**	-0.0003***
<i>Tedu</i>	0.193***	0.154***	0.200***	0.120***	0.188**	0.131***
<i>Vedu</i>	0.027	-0.016	0.026	0.004	0.021	-0.018
<i>Ledu</i>	-0.090**	-0.062**	-0.076***	-0.077***	-0.096***	-0.109***
<i>Indigenous</i>	0.041	0.049	-0.038	0.047	-0.000	0.095*
<i>married</i>	0.123***	0.072***	0.096***	0.060***	0.101**	0.033**
<i>occup_m</i>	0.208***	0.187***	0.249***	0.227***	0.277**	0.270***
<i>occup_p</i>	0.180***	0.232***	0.252***	0.273***	0.243**	0.240***
<i>occup_ap</i>	0.058*	-0.012	0.105***	-0.037	0.132**	-0.073**
<i>occup_i</i>	-0.018	-0.043	-0.008	-0.036	0.017	-0.099
<i>occup_l</i>	-0.197***	-0.154***	-0.155***	-0.131***	-0.147**	-0.143***
<i>lone14</i>	0.031	-0.006	0.030	0.011	0.025	-0.005
<i>f_occup_mp</i>	-0.001	0.013	0.004	0.029*	-0.020	0.017
<i>f_occup_l</i>	-0.039	0.001	-0.003	-0.008	-0.037	-0.034
<i>f_occup_n</i>	-0.022	0.008	-0.029	-0.010	-0.060*	0.040
<i>m_occup_mp</i>	0.022	-0.012	0.024	0.034*	0.011	0.025
<i>m_occup_l</i>	0.015	-0.091***	-0.004	-0.061**	0.010	0.029
<i>m_occup_n</i>	-0.004	-0.047*	-0.044**	-0.007	0.007	0.004
<i>Constant</i>	2.192***	2.560***	2.335***	2.617***	2.492***	2.607***
Regional dummies			Yes			
R2	0.22	0.27	0.25	0.25	0.28	0.28
Obs.	2,079	2,076	2,810	2,743	2,980	2,869

t statistics in parentheses, \* p&lt;0.10, \*\* p&lt;0.05, \*\*\* p&lt;0.01

Table C Estimation results of the earnings equation (full sample)

Variables	2006		2011		2016	
	males	females	males	females	males	females
<i>age</i>	0.072***	0.016	0.062***	0.014	0.071***	0.019***
<i>age2</i>	-0.001***	-0.0002	-0.0007***	-0.0001	-0.0008***	-0.0002*
<i>Tedu</i>	0.215***	0.190***	0.150***	0.124***	0.146***	0.173***
<i>Vedu</i>	0.094**	-0.058	0.039	-0.029	0.033	0.036
<i>Ledu</i>	-0.052	-0.137***	-0.098***	-0.139***	-0.104***	-0.089**
<i>Indigenous</i>	0.056	0.096	-0.033	0.073	-0.108	0.058
<i>married</i>	0.176***	-0.068**	0.153***	-0.078***	0.151***	-0.072***
<i>occup_m</i>	0.367***	0.478***	0.431***	0.533***	0.445***	0.566***
<i>occup_p</i>	0.220***	0.341***	0.336***	0.394***	0.313***	0.377***
<i>occup_ap</i>	0.078**	-0.060	0.168***	-0.027	0.194***	-0.017
<i>occup_i</i>	0.094**	0.250**	0.122***	0.193**	0.135***	-0.026
<i>occup_l</i>	-0.376***	-0.350***	-0.229***	-0.282***	-0.268***	-0.364***
<i>lone14</i>	0.014	0.019	0.001	0.011	0.028	-0.002
<i>f_occup_mp</i>	0.027	0.005	0.020	-0.010	0.001	0.024
<i>f_occup_l</i>	-0.043	0.044	-0.024	-0.027	-0.025	-0.015
<i>f_occup_n</i>	-0.077	0.077	-0.043	-0.119**	-0.019	0.016
<i>m_occup_mp</i>	0.029	-0.010	0.028	0.059**	0.021	0.081***
<i>m_occup_l</i>	0.045	-0.087**	0.039	-0.008	0.017	0.058
<i>m_occup_n</i>	-0.009	-0.071**	-0.047*	-0.011	-0.029	0.023
<i>Constant</i>	5.221***	6.154***	5.604***	6.346***	5.602***	6.434***
Regional dummies				Yes		
R2	0.25	0.27	0.26	0.23	0.27	0.27
Obs.	2,079	2,078	2,815	2,746	2,984	2,873

t statistics in parentheses, \* p<0.10, \*\* p<0.05, \*\*\* p<0.01

Table D Estimation results of the wage equation (full-time workers only)

Variables	2006		2011		2016	
	males	females	males	females	males	females
<i>age</i>	0.0481***	0.0344***	0.040***	0.031***	0.045***	0.051***
<i>age2</i>	-0.0005***	-0.0004***	-0.0004***	-0.0003***	-0.0005**	-0.0005***
<i>Tedu</i>	0.217***	0.153***	0.208***	0.125***	0.197***	0.146***
<i>Vedu</i>	0.036	-0.020	0.021	-0.006	0.011	-0.024
<i>Ledu</i>	-0.103***	-0.08*	-0.083***	-0.059*	-0.093**	-0.115**
<i>Indigenous</i>	0.0158	0.055	-0.050	0.009	0.019	0.055
<i>married</i>	0.097***	0.033	0.089***	0.048**	0.091***	0.016
<i>occup_m</i>	0.159***	0.164***	0.224***	0.200***	0.269***	0.248***
<i>occup_p</i>	0.137***	0.164***	0.223***	0.217***	0.239***	0.174***
<i>occup_ap</i>	0.044	-0.012	0.100***	-0.006	0.138***	-0.059
<i>occup_i</i>	-0.015	-0.031	-0.029	-0.068	0.019	-0.056
<i>occup_l</i>	-0.165***	-0.221***	-0.136***	-0.163***	-0.129***	-0.156***
<i>lone14</i>	0.030	-0.030	0.055**	-0.002	0.018	-0.000
<i>f_occup_mp</i>	-0.008	-0.015	-0.005	0.015	-0.022	-0.001
<i>f_occup_l</i>	-0.035	-0.058	-0.022	-0.013	-0.029	-0.033
<i>f_occup_n</i>	-0.039	0.049	-0.029	0.018	-0.070**	-0.009
<i>m_occup_mp</i>	0.024	-0.015	0.027	0.057*	0.010	0.036
<i>m_occup_l</i>	0.010	-0.052	-0.0055	-0.043	0.004	0.002
<i>m_occup_n</i>	0.004	-0.027	-0.041*	0.015	0.010	-0.027
<i>Constant</i>	2.022***	2.336***	2.337***	2.444***	2.504***	2.320***
Regional dummies				Yes		
R2	0.22	0.27	0.26	0.25	0.29	0.32
Obs.	1,898	1,144	2,570	1,556	2,694	1,619

t statistics in parentheses, \* p<0.10, \*\* p<0.05, \*\*\* p<0.01



Table E Estimation results of the earnings equation (full-time workers only)

Variables	2006		2011		2016	
	males	females	males	females	males	females
<i>age</i>	0.048***	0.027***	0.045***	0.031***	0.049***	0.055***
<i>age2</i>	-0.0005***	-0.0003***	-0.0005***	-0.0003***	-0.0005***	-0.0006***
<i>Tedu</i>	0.228***	0.171***	0.205***	0.135***	0.207***	0.153***
<i>Vedu</i>	0.047	-0.025	0.032	-0.023	0.037	-0.023
<i>Ledu</i>	-0.112***	-0.078**	-0.086**	-0.084**	-0.081**	-0.127***
<i>Indigenous</i>	-0.047	0.028	-0.027	0.016	0.030	0.052
<i>married</i>	0.110***	0.027	0.101***	0.033	0.087***	0.010
<i>occup_m</i>	0.254***	0.287***	0.333***	0.315***	0.355***	0.334***
<i>occup_p</i>	0.156***	0.224***	0.247***	0.270***	0.273***	0.221***
<i>occup_ap</i>	0.040	0.026	0.119***	-0.009	0.159***	-0.063
<i>occup_i</i>	0.066*	0.005	0.059	-0.009	0.093***	-0.062
<i>occup_l</i>	-0.183***	-0.251***	-0.138***	-0.157**	-0.136***	-0.142***
<i>lone14</i>	0.020	-0.016	0.053*	-0.006	0.025	0.014
<i>f_occup_mp</i>	0.009	-0.025	0.008	0.018	-0.012	0.006
<i>f_occup_l</i>	-0.024	-0.047	-0.036	-0.041	-0.021	-0.034
<i>f_occup_n</i>	-0.044	0.059	-0.033	0.027	-0.045	0.003
<i>m_occup_mp</i>	0.019	-0.012	0.017	0.069***	0.024	0.053***
<i>m_occup_l</i>	0.003	-0.068**	-0.000	-0.031	-0.003	0.011
<i>m_occup_n</i>	-0.018	-0.036	-0.052**	0.007	-0.002	-0.027
<i>Constant</i>	5.779***	6.195***	6.013***	6.134***	6.145***	5.907***
Regional dummies				Yes		
R2	0.23	0.34	0.26	0.30	0.30	0.37
Obs.	1,898	1,145	2,573	1,558	2,695	1,619

t statistics in parentheses, \* p&lt;0.10, \*\* p&lt;0.05, \*\*\* p&lt;0.01