GRADUATE SALARIES 2013

A report on the earnings of new Australian graduates in their first full-time employment





Graduate Salaries 2013

A REPORT ON THE EARNINGS OF NEW AUSTRALIAN GRADUATES IN THEIR FIRST FULL-TIME EMPLOYMENT





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Salaries 2013 Explanatory Notes: Available online www.graduatecareers.com.au/Research/ResearchReports/ GraduateSalaries.

INTRODUCTION

... first-year starting salaries are not necessarily indicative of graduates' earning potential in later years of their careers...

Welcome to Graduate Salaries 2013, the 28th edition of the annual report of the salaries of recent Australian higher education graduates. This report presents baseline information regarding the median starting salaries of Australian resident bachelor degree graduates aged less than 25 and in their first full-time employment in Australia approximately four months after course completion, along with comparative salary figures from other cohorts.

The Graduate Destination Survey (GDS), conducted annually by Graduate Careers Australia (GCA) as a part of the Australian Graduate Survey (AGS), is a study of the activities of new higher education graduates. In the 2013 GDS, new graduates who completed the requirements for their qualifications in the calendar year 2012 were surveyed (about four months after course completion) regarding their major activities, including participation in further study, full- or part-time employment, whether they were seeking employment, or were unavailable for work or study.

This report contains only a brief introduction into the most relevant of information available on salaries for new graduates. Further information can be found in more detailed tables and figures available for download in Microsoft Excel format from the Graduate Careers Australia website at <a href="https://www.graduatecareers.com.au/Research/R

A number of tables and figures are discussed but not presented in this report. These supplementary tables and figures have been labelled accordingly within this report, and contain hyperlinks to the corresponding web page containing this extra information.

When interpreting the figures contained within this report it is important to keep in mind that graduate salaries may potentially be influenced by domestic labour market forces as well as national and global economic trends, and are therefore not necessarily reflective of the quality of graduates in terms of their academic results or employability skills. It should also be noted that the reported salaries in some fields of education are based on a low number of responses and must be interpreted with caution.

It should also be noted that first-year starting salaries are not necessarily indicative of graduates' earning potential in later years of their careers, as longer-term salary growth in different sectors of employment may be influenced by labour market and other economic factors, career choices or opportunities, geographical factors and, for graduates in certain fields, professional accreditation or registration requirements. A longer-term investigation of graduate salary growth is presented in Beyond Graduation 2013, a detailed investigation conducted by GCA into the activities and outcomes of graduates from Australian higher education institutions approximately three and five years after the completion of their studies (GCA 2014a).

This report does not attempt to provide a cost-benefit analysis of obtaining a higher education qualification¹. A purely financial assessment of undertaking higher education would need to account for a wide range of costs, such as course fees, textbooks, living expenses, transport and childcare, as well as the opportunity costs resulting from the income forgone whilst studying.

Moreover, such an analysis would fail to account for the personal growth and fulfilment stemming from a higher education that may be, to some individuals, a more powerful motivator to study than any potential for financial benefit or labour market advantage.

Throughout this report, we refer often to "Explanatory Notes". These notes both act as a guide to some of the discussion contained within this report and as a glossary to some of the terms and concepts, including the use of Male Average Weekly Earnings (MAWE), interpretation of the statistical significance tests, fields of education and the methodology of the Australian Graduate Survey (AGS). These "Explanatory Notes" can be found www.graduatecareers.com.au/Research/Research/Research/Rasearch/GraduateSalaries.

References to Australian Bureau of Statistics (ABS) publications are included throughout this report to provide comparative population benchmarks of salary growth; they should not be interpreted as prescriptive explanations of graduate salary levels. As in previous editions of this report, MAWE is used as the primary long-term benchmark of salary levels in the wider Australian population. (Average weekly earnings figures for females have only been collected by the ABS since 1981.) When appropriate, annualised average weekly earnings figures for males, females and all persons are included separately to permit more detailed comparisons between graduate salaries and earnings in the wider Australian population.

While the AGS is conducted as a census, whereby every graduate from an Australian higher education institution is approached for the purposes of data collection, the extent of non-response to the survey² means that it is reasonable, and indeed prudent, to use statistical methods to analyse the resulting sample of responses. Statistical significance tests are included in tables which examine whether key salary indicators, such as median salaries, working hours and hourly pay rates differ significantly between groups of interest.

¹ Recent studies have estimated that the average private rate of return of a university education in Australia is anywhere from 9.4 per cent (Chapman & Salvage 1997) to 14.5 per cent (Borland 2002), although this can vary considerably based on both the level and field of education of the qualification obtained.

² Overall, 40.0 per cent of the Australian resident graduates surveyed did not respond to the Graduate Destination Survey (GDS) component of the 2013 AGS (GCA 2014b).

1.0 GRADUATE STARTING SALARIES

In 2013, the GSS was \$52,500, up from \$52,000 in 2012 and \$50,000 in 2011 This chapter of the report introduces Graduate Starting Salaries (GSS), the median starting salaries of bachelor degree graduates aged less than 25 in their first full time employment in Australia and broadly examines how they compare by sex, broad fields of education and employment sector.

In 2013, the GSS was \$52,500, up from \$52,000 in 2012 and \$50,000 in 2011 (see Table 1 and Table 4).

Graduate starting salaries by sex

The aggregate median starting salaries for male and female graduates were \$55,000 and \$51,600 respectively (males remained unchanged from their 2012 figure whereas females increased by \$1,600 – see Table 1).

Statistically significant differences³ in median GSS by sex were observed in eight of the 23 fields of education under examination, seven of which showed a male pay advantage (although in the case of paramedical studies and education graduates this pay advantage was negligible at \$1,000), while the field of medicine showed equal pay for both males and females.

Architecture and building graduates exhibited the largest (statistically significant) difference between males and females, with male architecture and building graduates earning a median starting salary \$6,500 greater than their female counterparts. This was followed by:

- social sciences (\$6,000) and
- humanities (\$5,000).

Four of the 23 fields of education reported a female pay advantage with graduates from the field of earth science reporting the highest female pay advantage of \$5,000.

Further examination of the differences between male and female graduate salaries can be found in chapter 2.

It should be noted that the reported salaries in some fields of education are based on a low number of responses and must be interpreted with caution. It is also important to note that these figures only give a broad overview of graduate salaries and do not represent evidence of a gender based wage gap for new graduates entering in the Australian labour market. A number of factors influence true wage gaps between males and females and as the figures presented here are reported by broad fields of education only, they should not be used as conclusive evidence. A detailed analysis of the gender wage gap in the Australian labour market is discussed in the white paper published by GCA entitled. An analysis of the gender wage gap in the Australian Graduate Labour Market, 2013 and can be downloaded from www.graduatecareers.com.au/research/ researchreports/orap/.

³ A statistically significant result is unlikely to have occurred by chance. As such, a statistically significant difference observed in the AGS sample can be reliably inferred to exist in the overall graduate population. For more information, please see explanatory notes at <a href="https://www.graduatecareers.com.au/Research/Researc

Table 1: Median starting salaries of bachelor degree graduates in first full-time employment and aged less than 25, by field of education and sector of employment, 2013 (\$, '000, n)"

					Sector o	f employn	nent						Sex	
	Australian Government	State Government	Public Health	*Total Government	Professional Practice	Industry/ Commerce	Schools	Tertiary Education	Total Education	Significance	§ TOTAL	Males	Females	Significance
Accounting	58.4	54.7	. † .	56.0	49.0	49.0	†	†	†		50.0	50.0	49.0	
	12	11	· of	29	454	286	. †.	. † .	. † .		781	375	406	• •
Agricultural Science	+	†	* † *	48.0	* †	48.5	* * *	* * †	* *†	· · · · ·	50.0	50.0	49.0	
A 11: 0 D 111:	†	†	† .	. 12	, †	. 82			†		. 107.	. 47.	. 60 .	
Architecture & Building	T +	†	†	60.0	40.0	50.0		• • •	* *		49.2	50.0	43.5	•
A . 0 D . :	T +	†	†	29	77	171		- T	-	**	284	156	128	
Art & Design	+	+	+	+	38.5	40.0	58.3		58.0		40.0	42.0	40.0	•
Dialasias Caisasas					10	205	18		25		269	85	184	<u> </u>
Biological Sciences	60.0	54.0	53.0	55.0	47.0	45.0	52.0	55.0	55.0		48.0	50.0	48.0	
Computer Science	60.0	11	25	53 58.0	55.0	225 50.0°	32	. 28	52.0		53.0	137	284	
Computer Science		T +	+	32	22		* †	* * †			325	52.5	55.0 52	-
Dentistry	18	+	75.0	76.3	90.0	247	+	+	11		80.0	273 82.5	80.0	
Бенизи у	· · · · · · · · · · · · · · · · · · ·	†	32	34	26	†	+	+	†		63	24	39	•
Earth Sciences	†	†	†	†	†	65.0	†	†	†		60.0	57.0	62.0	
Lattif Sciences	+	+	†	+	+	69	+	+	+		87	55	32	
Economics, Business	57.0	53.0	†	55.0	50.0	47.0	40.0	52.0	49.0	**	49.0	50.0	47.0	**
Economics, business	47	25	+	129	256	1,431	30	19	49		1,983	841	1,142	
Education	+/	53.0	+	53.0	± ±	45.5	57.0	†	57.0	**	57.0	58.0	57.0	**
Ludcation	+	19	+	27	†	63	900	+	904		1,032	163	869	
Engineering	65.0	60.0	+	63.0	60.3	65.0	†	+	57.0	**	64.0	63.0	64.5	
Engineering	42	15	+	94	386	749	†	+	13		1,271	1,013	258	
Humanities	55.0	53.7	†	54.0	52.0	40.0	56.0	49.8	53.0	**	45.0	50.0	45.0	**
ramanacs	50	38	+	127	96	524	70	24	94		922	225	697	
Law	58.2	55.0	+	57.0	55.0	54.0	†	†	+		55.0	55.5	55.0	
-	15	11	+	39	175	77	†	†	+		304	94	210	
Mathematics	+	+	+	+	†	56.0	†	+	+		55.0	56.9	54.5	
	+	+	+	+	†	34	†	+	+		59	39	20	
Medicine	+	+	60.0	60.0	50.0	50.0	+	+	+	**	60.0	60.0	60.0	**
	+	+	341	343	17	17	+	+	+		388	160	228	
Optometry	†	†	Ť	†	72.5	†	†	†	t		70.0	†	70.0	
	†	†	t	+	12	†	†	†	†		22.0	†	15	
Paramedical Studies	†	56.0	54.0	54.0	54.0	52.0	55.0	55.0	55.0	**	54.0	55.0	54.0	**
	†	17	1,024	1,054	220	387	22	12	34		1,808	283	1,525	
Pharmacy	†	†	44.2	44.1	t	38.0	†	t	t	**	39.0	39.0	39.3	
	†	†	69	70	t	202	†	†	t		278	94	184	
Physical Sciences	55.0	†	+	59.0	t	55.0	†	t	t		55.0	55.0	54.0	
	10	+	+	15	t	47	+	t	t		82	49	33	
Psychology	+	+	55.0	55.0	46.5	45.0	52.5	57.5	56.3	**	50.0	50.0	50.0	
	+	+	10	27	28	114	16	16	32		253	45	208	
Social Sciences	†	+	t	54.0	52.8	41.3	t	t	†	**	50.0	55.0	49.0	**
• • • •	t	t	t	37	14	38	t	†	†		118	27	91	
Social Work	· · · · ·	+ .	, t,	54.8	t	43.5	t	t	†	**	50.0	†	50.0	
	. 4	• • †	· · †	• •18	t	10	t	t	†		97	†	91	
Veterinary Science	·	†	†	i i	46.0	†	t	†	†		46.0	†	46.0	
			· †•	. †	61	. †	t	†	t		68.0	†	61	
TOTAL	58.0	55.0	55.0	55.0	53.0	50.0	57.0	53.0	57.0		52.5	55.0	51.6	
	244	179	1,543	2,193	1,926	4,991	1,128	146	1,274		11,022	4,205	6,817	

[&]quot; See <u>Graduate Salaries 2013 Explanatory Notes (Sections 1, 2, 5 and 7).</u>
† Blank cells contain no, or fewer than 10 respondents.

[‡]'Total Government' includes local government, which is not listed separately.

⁵ 'TOTAL' includes the category other employers not elsewhere indicated' (including non-profit employers), which is not listed separately.

* = difference statistically significant at 5 per cent level; ** = difference statistically significant at 1 per cent level

Graduate starting salaries by broad fields of education

Looking at GSS by broad fields of education, dentistry remained the highest-paid field of education with a starting salary of \$80,000, followed by:

- optometry (\$70,000),
- engineering (\$64,000),
- earth science and medicine (\$60,000), and
- education (\$57,000).

The largest growth in median starting salary between 2012 and 2013 was observed in the fields of:

- social sciences (\$3,000 a growth of 6.4 per cent),
- law and paramedical studies (\$2,000 a growth of 3.8 per cent), and
- architecture and building (\$1,200 a growth of 2.5 per cent).

It is important to note that some of the above figures are based on a small number of responses and must be interpreted with caution.

When examining the salary range within a broad field of education, statistically significant salary differences by employment sectors were observed in 15 of the 23 fields. Within these 15 fields there was evidence of some very wide salary ranges, with 10 of these fields exhibiting median salary range of at least \$10,000 between the lowest and highest ranked sector of employment.

The widest median salary range was observed for arts and design graduates (\$19,800), with graduates employed in the professional practice sector earning the lowest median starting salary (\$38,500) and graduates employed in the schools sector earning the highest (\$58,300). This large salary range must be interpreted with caution however as these were the only three sectors with a valid number of cases for this field. This was followed by economics and business graduates with a difference of \$17,000 (a median salary of \$40,000 in schools sector compared with a median salary of \$57,000 in Australian Government sector). Humanities and biological science graduates exhibited salary ranges of \$15,000 or more between their lowest and highest starting salaries.

Graduate starting salaries by employment sector

Considerable differences were observed when examining median GSS in particular sectors of employment across graduates from different fields of education (although this is hardly surprising considering that, in many cases, different fields of education lead to substantially different occupational pathways).

In the Australian Government sector, engineering graduates earned the highest median starting salary at \$65,000. Physical sciences graduates and humanities earned the lowest median starting salary in this sector (\$55,000), although this figure for physical science graduates is based on a relatively small number of responses (n = 10) and should therefore be interpreted with a degree of caution.

Engineering graduates also earned the highest median starting salary in the state government sector (\$60,000), while education and economics & business graduates earned the lowest median starting salary (\$53,000). These figures however should be treated with some caution as they are based on small samples.

Dentistry graduates had, by a sizeable margin, the highest median starting salary in the public health sector (\$75,000) while pharmacy graduates earned the lowest median starting salary (\$44,200).

Dentistry graduates also earned the highest median starting salary in the professional practice sector (\$90,000). This was the highest median starting salary for any field of education within any sector of employment. Art and design graduates earned the lowest median starting salary in this sector (\$38,500), although this figure is again based on a small number of responses (n = 10).

In the industry and commerce sector, earth sciences and engineering graduates earned the highest median starting salaries at \$65,000. Pharmacy graduates earned the lowest median starting salary (\$38,000), which was the lowest median starting salary for any field of education within any sector of employment.

Arts and design graduates had the highest median starting salary in the schools sector (\$58,300) while economics and business graduates earned the lowest median starting salary (\$40,000).

Psychology graduates earned the highest median starting salary in the tertiary education sector (\$57,500) while humanities graduates earned the lowest median starting salary (\$49,800) in this sector.

Looking at the sectors themselves, overall, graduates employed in the Australian Government sector earned the highest median starting salary (\$58,000) of all sectors in 2013 followed by the schools sector (\$57,000) and state government and public health sectors (\$55,000).

The school and Australian Government sectors have been the highest paid sectors since 2008 but 2013 is the first year since 2008 that the state government sector has been ranked as one of the highest paying sectors. As was the case in recent years, graduates employed in the industry and commerce sector earned the lowest median starting salary (\$50,000).

Looking at the salary range between the highest and lowest earning fields of education within each sector, we see that graduates employed by the state government reported the smallest range between the highest and lowest earning fields of education (13.2 per cent or \$7,000 between engineering and economics & business graduates. This was followed by:

- the tertiary education sector (15.5 per cent or \$7,700 between graduates from psychology and humanities), and
- Australian Government sector (18.2 per cent or \$10,000 between graduates from engineering, humanities and physical sciences).

The professional practice sector reported the widest range in starting salaries with the highest salary in that sector (\$90,000 for dentistry graduates) more than double the lowest salary earned within this sector (\$38,500 for art and design graduates). This is not surprising due to the myriad factors that determine the cost of services in the private sector.

When we compare the annual growth in starting salaries from 2012 to 2013 by employment sector, the highest growth has been reported by graduates employed by the Australian Government with an overall increase in reported starting salary by 5.5 per cent or \$3,000. This was followed by:

- public health overall increase in starting salary by 3.8 per cent (\$2,000)
- professional practice and state government – overall increase in starting salary by 1.9 per cent (\$1,000)
- schools overall increase in starting salary by 1.8 per cent (\$1,000)

Graduate salaries within the tertiary education sector showed a shift from \$55,000 in 2012 to \$53,000 in 2013 (a decrease of 3.6 per cent).

2.0 SALARIES FOR MALES AND FEMALES

The median starting salary for female graduates ... was equivalent to 93.9 per cent of the median starting salary earned by their male counterparts ... 3.0 percentage points higher than the corresponding figure in 2012

The focus of this chapter is further investigation into differences in starting salaries by sex including an examination of differences by field of education, enrolment profiles and the average number of working hours.

Median starting salaries for female graduates aged less than 25 and in their first full-time employment as a percentage of the corresponding figure for male graduates are presented in Table 2. Some caution should be exercised when examining fields of education which typically contain a small number of responses (e.g. mathematics and optometry).

The median starting salary for female graduates (\$51,600) was equivalent to 93.9 per cent of the median starting salary earned by their male counterparts (\$55,000) in 2013. This figure is 3.0 percentage points higher than the corresponding figure in 2012 (90.9 per cent) but 3.6 percentage points lower than the series high point of 97.5 per cent in 2005. The current figure is also less than the average of the last 10 years (95.0 per cent) albeit by a very small margin.

Median starting salaries for female graduates have experienced notable fluctuations relative to median starting

Table 2: Median starting salaries for female graduates as a percentage of median starting salaries for male graduates based on bachelor degree graduates aged less than 25 and in first full-time employment, by field of education, 1977-2013**

	1977	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	
Accounting	97.7	96.0	99.1	98.3	99.3	98.0	98.7	98.2	98.4	99.5	94.0	100.0	100.0	99.6	98.0	96.0	98.8	
Agricultural Science	96.0	87.5	95.2	92.6	93.5	93.8	94.8	100.0	92.3	97.6	103.2	98.7	97.6	96.0	100.0	100.8	100.0	
Architecture & Building	103.4	100.0	95.8	86.7	97.1	92.8	89.0	96.6	96.6	89.7	100.5	89.5	90.4	85.1	100.0	97.8	100.0	
Art & Design	†	†	†	†	†	†	†	· · · · · ·	Ť	t	†	. †	90.0	99.0	93.2	95.7	91.7	
Biological Sciences	100.0	101.0	98.2	94.5	91.7	99.3	93.9	99.4	99.5	98.0	98.6	97.8	97.9	96.8	97.7	100.4	96.5	
Computer Science	101.0	99.1	100.0	99.3	98.1	97.1 -	100.0	101.0	99.5	97.4	97.6	98.5	99.3	99.3	100.0	93.6	100.0	
Dentistry	94.2	90.3	86.3	80.7	91.7	83.3	82.2	87.7	90.3	95.0	93.9	88.6	83.4	92.8	95.0	105.2	96.9	
Earth Sciences	†	93.8	102.5	92.4	95.0	104.6	105.2	101.6	96.7	95.7	96.6	108.0	96.8	106.3	112.4	100.0	100.0	
Economics, Business	96.8	93.4	97.4	96.1	98.6	98.7	100.6	99.4	100.0	100.0	98.2	97.9	98.8	99.6	98.0	98.4	98.4	
Education	95.1	99.1	101.7	93.7	94.2	96.0	100.0	97.9	101.0	99.5	99.1	100.0	97.6	95.9	93.3	92.6	94.5	
Engineering	95.1	108.6	98.4	103.4	98.8	97.2 °	99.5	100.0	100.0	98.2	100.0	98.8	97:1	100.7	100.3	101.7	98.7	
Humanities	100.0	96.0	93.8	98.3	91.5	92.7	99.4	98.8	99.4	101.0	98.6	95.9	97.3	99.1	100.0	94.6	96.0	
Law	98.2	100.0	100.0	102.4	102.0	94.4	99.1	116.5	107.6	110.1	97.7	95.8	94.1	92.5	95.7	97.9	91.7	
Mathematics	97.9	100.0	98.3	97.8	98.1	98.7	97.1	97.3	95.1	99.1	95.9	100.0	96.9	94.4	97.8	93.8	92.5	۰
Medicine	90.7	96.0	97.4	97.1	98.5	97.7	92.9	95.7	98.0	98.4	98.6	96.4	95.4	85.7	92.1	100.0	95.0	
Optometry	†	†	†	1	° †	+ *			1 1		97.0	96.6	106.7	101.7	88.2	91.4	91.4	
Paramedical Studies	†	t	, †	†	. t.	. † .	. †	†		. t.	97.5	92.0	96.3	96.9	96.2	92.6	99.2	
Pharmacy	91.9	101.2	104.8	99.0	100.0	97.5	95.4	100.7	98.6	101.3	100.6	93.8	109.3	94.4	100.0	105.8	95.5	
Physical Sciences	98.9	101.8	99.2	98.5	96.0	100.6	101.8	98.4	93.1	94.8	97.4	99.6	100.0	94.8	94.5	98.2	102.6	
Psychology	96.9	98.0	96.4	97.6	98.6	96.7	96.3	95.1	100.0	97.1	95.6	96.1	98.3	99.2	94.6	100.8	104.2	
Social Sciences	100.0	103.2	101.9	95.2	93.6	93.9	101.3	98.8	99.5	103.1	94.6	97.3	91.7	90.6	100.0	95.5	100.0	
Social Work	96.2	99.1	103.3	100.7	104.2	103.0	100.0	97.0	99.0	99.1	95.3	98.3	†	†	. +.	• +	93.9	
Veterinary Science	†	98.2	94.3	96.2	100.0	100.7	98.1	94.3	99.5	98.6	99.1	92.4	96.2	98.9	100.7	96.4	100.0	
Total	95.9	95.5	94.2	92.6	93.5	95.1	93.2	95.7	93.1	95.8	93.3	91.6	93.4	94.3	92.6	92.6	94.8	

See Graduate Salaries 2013 Explanatory Notes (Sections 2, 9, 10 and 11).

[‡] Data from 1978 are incompatible with those from other years and have been excluded from the series.

[†] Insufficient males or females in sample to allow comparison.

salaries for male graduates over the years, with pharmacy graduates reporting the highest female median graduate starting salary (GSS) relative to the median male GSS in the last 10 years (101.2 per cent) followed by engineering and earth science (100.4 per cent) and computer science (100.1 per cent).

Architecture and building was the field of education with the lowest female GSS relative to male GSS, on average for the last 10 year (87.6 per cent), followed by economics and business (92.8 per cent), art and design (94.4 per cent – see Table 2).

Differences in median GSS for males and females appear to be related, at least in part, to differing gender enrolment profiles. Male graduates tend to be overrepresented in fields of education with higher median starting salaries, while female graduates tend to be over-represented in fields of education with lower median starting salaries (see Table 3).

A recent investigation in the graduate gender wage gap in Australia suggested that the aggregate graduate gender wage gap in favour of males was partly attributable to a higher concentration of males in engineering (Lindsay, 2013). Alternatively, females outnumbered males in Humanities, which was ranked at the lower end of the salary distribution. The study also found that when controlling for field of education, personal, enrolment and occupational characteristics of male and female graduates, the aggregate gender wage gap was markedly reduced to 4.4 per cent.

1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	10 year Avg
100.0	98.5	96.4	98.9	100.0	99.0	102.4	94.3	97.1	100.0	97.2	96.1	97.6	100.0	100.0	100.0	95.8	96.0	98.0	98.1
94.8	97.4	102.2	98.6	97.2	100.0	100.0	100.0	100.3	94.3	103.3	99.0	102.5	97.7	96.6	102.3	102.2	99.0	98.0	99.5
92.0	91.9	96.2	93.6	96.4	89.7	100.0	88.2	97.1	91.7	85.0	91.5	88.4	88.9	85.6	88.9	86.0	82.7	87.0	87.6
95.8	100.0	96.2	92.6	94.2	93.3	100.0	96.7	88.5	96.7	96.9	99.1	94.4	87.8	87.5	97.4	95.2	94.1	95.2	94.4
98.9	98.6	100.0	96.6	100.0	103.3	95.0	98.9	97.2	97.3	100.0	102.6	100.0	96.4	98.9	101.1	98.3	101.0	96.0	99.2
96.7	99.7	99.7	97.0	100.0	100.0	100.0	95.5	97.4	100.0	97.5	95.2	104.7	95.7	100.5	100.0	97.1	105.8	104.8	100.1
86.8	100.0	92.0	90.7	87.5	104.2	90.0	89.7	86.5	106.2	95.4	100.7	100.7	92.0	100.0	104.9	93.8	84.3	97.0	97.5
105.6	97.7	101.7	100.0	112.1	105.8	92.1	97.0	100.0	105.0	98.5	95.3	91.3	122.4	96.4	91.1	85.7	109.5	108.8	100.4
96.3	96.4	95.9	93.3	97.4	93.8	94.1	94.3	97.5	94.6	90.0	95.0	95.2	91.1	93.9	90.0	90.0	94.0	94.0	92.8
96.4	95.3	98.4	97.2	99.1	100.0	97.6	98.9	98.8	97.6	100.0	96.6	100.0	97.9	100.0	100.0	100.0	100.0	98.3	99.0
100.0	101.5	99.1	100.0	102.9	102.7	101.3	100.0	100.0	100.0	100.0	100.0	100.0	101.9	96.6	101.8	100.0	101.6	102.4	100.4
94.2	96.2	98.1	100.4	93.3	100.0	97.0	97.0	94.3	91.9	97.2	96.1	94.7	95.2	96.5	93.3	97.7	100.0	90.0	95.3
96.0	95.2	100.0	100.0	96.8	97.0	92.1	100.0	97.4	92.7	97.6	96.2	97.8	97.9	91.7	94.8	96.2	92.2	99.1	95.6
92.9	90.3	93.4	93.8	93.0	93.0	94.7	96.2	100.8	100.0	92.1	97.6	100.3	97.0	93.5	100.0	100.0	96.4	95.8	97.3
- 100.0	100.0	100.0	95.2	93.3	100.0	90.0	100.0	90.0	96.0	97.6	89.1	94.3	94.3	91.8	99.1	96.7	100.0	100.0	95.9
96.3	100.0	98.7	99.2	92.9	91.7	109.8	91.3	99.0	89.4	89.7	109.6	†	88.2	108.3	100.0	97.2	91.5	87.5	95.7
96.3	94.4	96.6	99.0	93.8	95.2	94.3	97.2	94.7	95.0	100.0	97.6	95.6	95.7	97.9	99.0	96.2	98.1	98.2	97.3
100.0	102.4	102.3	92.1	103.3	83.3	100.0	104.0	100.7	98.0	99.7	104.9	96.5	97.7	100.0	102.9	101.1	110.3	100.9	101.2
96.4	96.7	96.7	99.3	94.1	93.3	98.0	94.1	96.7	102.7	90.0	101.3	93.2	98.1	99.0	105.0	106.0	101.8	98.2	99.5
96.3	101.9	108.9	96.6	97.9	93.6	101.5	94.3	97.5	95.6	95.0	95.2	97.0	95.8	100.0	105.5	94.0	99.0	100.0	97.7
89.3	93.3	103.2	91.7	95.9	90.9	95.8	91.5	97.1	100.0	98.3	89.5	90.5	96.5	91.1	99.3	104.8	104.4	89.1	96.4
96.4	96.6	99.7	97.5	96.3	· · · · · ·	° f	94.6	102.2	99.7	100.0	102.4	97.8	105.6	100.0	†	102.0	98.2	94.3	100.0
100.0	100.0	100.0	103.2	97.9	95.6	94.3	98.9	100.0	99.2	93.6	97.4	100.0	96.9	94.7	o to	104.7	97.8	98.3	98.1
93.6	91.7	95.0	96.8	92.3	92.8	94.4	94.6	95.5	97.4	97.5	95.2	93.3	95.7	94.0	96.0	96.2	90.9	93.9	95.0

Looking at Table 3, we see that the proportion of male graduates within the top five fields of education by median starting salary constitute a relatively large proportion of all male graduate respondents (29.9 per cent), compared with only 8.4 per cent of all female graduate respondents being represented in these five fields. Most of this difference appears to be due to a considerable overrepresentation of male graduates in the

field of engineering (24.1 per cent of all male graduates compared with only 3.8 per cent of all female graduates).

The next six fields of education account for 21.4 per cent of all male graduates and 39.7 per cent of all female graduates, with education and paramedical studies both accounting for relatively high proportions of all female graduates

(12.7 per cent and 22.4 per cent respectively). Computer science was the only one of these fields which saw a notably higher representation of males than females (6.5 per cent of all male graduates compared with 0.8 per cent of all female graduates). Overall, these higher ranked fields of education account for 51.4 per cent of all male graduates and 48.1 per cent of all female graduates.

Table 3: Percentage of males and females by field of education, for bachelor degree graduates aged less than 25 and in first full-time employment, by median starting salary rankings, 2013^{ct}

	Salary rank in 2013	Males as % of total males	Females as % of total females	Field of education as % of total	Females as % for field of education
(1) higher ranked fields					
Dentistry	1	0.6	0.6	0.6	61.9
Optometry	2	0.2	0.2	0.2	68.2
Engineering	3	24.1	3.8	11.5	20.3
Medicine	4	3.8	3.3	3.5	58.8
Earth Sciences	4	1.3	0.5	0.8	36.8
	Sub-total (1) [†]	29.9	8.4	16.6	
Education	6	3.9	12.7	9.4	84.2
Law	7	2.2	3.1	2.8	69.1
Physical Sciences	7	1.2	0.5	0.7	40.2
Mathematics	7	0.9	0.3	0.5	33.9
Paramedical Studies	10	6.7	22.4	16.4	84.3
Computer Science	11	6.5	0.8	2.9	16.0
	Sub-total (2) [†]	21.4	39.7	32.8	
	Higher ranked fields sub-total	51.4	48.1	49.4	
(2) lower ranked fields					
Accounting	• 12 •	8.9	6.0	• • • • • 7.1	52.0
Psychology	12	1.1	3.1	2.3	82.2
Social Sciences	• 12	0.6	1.3	• • • 1.1	• • • 77.1
Agricultural Science	12	1.1	0.9	1.0	56.1
Social Work	• • 12	0.1	1:3	0.9	93.8
Architecture & Building	17	3.7	1.9	2.6	45.1
Economics, Business	18	20.0	16.8	18.0	57.6
	Sub-total (3) [†]	35.6	31.2	32.9	
Biological Sciences	• • • 19	3.3	4.2	3.8	67.5
Veterinary Science		0.2	0.9	0.6	89.7
Humanities	° ° 21	5.4	10.2	8.4	75.6
Art & Design	22	2.0	2.7	2.4	68.4
Pharmacy	23	2.2	2.7	*2.5	66.2
	Sub-total (4) [†]	. 13.0	20.7	17.8	
	Lower ranked fields sub-total	48.6	51.9	50.6	
TOTAL		100	100	100	

[&]quot;See <u>Graduate Salaries 2013 Explanatory Notes (Sections 2 and 12).</u>

[†] Sub-totals may not add to 100.0 due to rounding.

The first seven of the lower-ranked fields of education account for 35.6 per cent of all male graduates and 31.2 per cent of all female graduates. This slight gender imbalance is largely due to an overrepresentation of male graduates within the fields of accounting (8.9 per cent of all male graduates compared with 6.0 per cent of all female graduates) and economics and business (20.0 per cent of all male graduates compared with 16.8 per cent of all female graduates).

The lowest ranked fields of education account for 13.0 per cent of all male graduates and 20.7 per cent of all female graduates. Overall, these lower-ranked fields of education account for 48.6 per cent of all male graduates and 51.9 per cent of all female graduates.

The information presented above suggests that choice of degree (or field of education) may be a contributing factor to the difference in median starting salaries for male and female graduates. This in itself may be dependent on numerous factors, including perceived gender roles in relation to career and non-career commitments.

Another factor which may contribute to the difference in median starting salaries for male and female graduates is the average number of hours graduates spent working in a given week (see *supplementary Table M in Graduate Salaries 2013 Tables and Figures*). Of the 23 fields of education examined in this report, statistically significant differences in average working hours between males and females were observed in six of them with males working longer hours in each of these fields.

The largest significant difference in mean hours worked was observed for architecture and building graduates, where males worked an average of 2.4 hours more per week than their female counterparts, followed by:

- medicine and economics & business (males worked an average of 1.9 hours more than females),
- humanities (males worked an average of 1.8 hours more than females), and
- accounting (males worked an average of 1.3 hours more than females).

Examining graduates' hourly rate of pay (calculated by dividing reported earnings by reported working hours), six fields of education reported statistically significant differences between males and females hourly rates (see *supplementary Table M in Graduate Salaries 2013 Tables and Figures*). The largest difference in hourly rate between males and females was observed in social sciences (males earned \$3.10 per hour more than females), followed by:

- architecture and building (males earned \$3.00 more per hour), and
- arts and design (males earned \$2.40 more).

Females earned an hourly rate marginally higher than that of males in the field of engineering (\$0.50 – this was statistically significant).

While it is outside the scope of the GDS to examine relative salary rates for males and females in the years following graduation4, the ABS reported in 2005 that females with a bachelor degree qualification who were employed full-time earned an average annual salary equivalent to 73.7 per cent of that of

their male counterparts (ABS 2006). It has been estimated that the gender wage gap in the UK is around 10 per cent for new graduates (in Australia this figure is 5.0 per cent on average in the last 10 years – see Table 2), but rises to around 25 per cent by the time graduates reach their mid-40s (Elias & Purcell 2004).

The gap between male and female Average Weekly Earnings (AWE) in the wider Australian population (for full-time employees) has been shown to increase with age. In 2009, the ratio of female to male average weekly earnings for 20-24 year olds in the wider Australian population was 0.93 (i.e. females in this age group received average weekly earnings equivalent to around 93 per cent of that of their male counterparts), while the ratio for 45-54 year olds was 0.74 (ABS 2011). A range of explanations for this gender wage gap have been proposed, including access to overtime, a disproportionate share of women in lower-paid occupations, the undervaluation of skills in female dominated industries and labour market discrimination (Chapman 2004; Preston 2007).

It should be noted that the overall gender wage gap⁵ in Australia as measured by the Organisation for Economic Cooperation and Development (OECD) in 2012 was 13.8 per cent (OECD 2012) which is below the average of 17.1, per cent for OECD countries where data is available, and ranking above both the USA (19.1 per cent) and UK (17.8 per cent). The gender based wage gap in Australia has fluctuated since 2000 with 2008 reported to be the year recording the smallest wage gap of 11.9 per cent and 2000 reported to be the year recording the highest wage gap of 17.2 per cent.

⁴ See <u>Beyond Graduation 2013 (GCA 2014)</u> for a detailed examination of graduate salary growth in the first three years following graduation.

⁵ Full-time employees. The gender wage gap is unadjusted and defined as the difference between male and female median wages divided by the male median wages.

GRADUATE STARTING SALARIES AND AVERAGE WEEKLY EARNINGS

As the salaries of higher education graduates grow over time, average weekly earnings for the population will increase accordingly

In order to get a perspective of how the graduate starting salaries compare to the overall population, the GSS has been historically benchmarked against Male Average Weekly Earnings (MAWE)6. The focus of this chapter is an examination of the 2013 GSS against MAWE, and a comparison of GSS for males and females against their corresponding Average Weekly Earnings (AWE).

In 2013, bachelor degree graduates aged less than 25 and in first full-time employment earned a median GSS of \$52,500, which is 74.6 per cent of the MAWE reported in 2013 (\$70,300 -ABS2013a see Table 4) and is the lowest figure observed since this series began⁷. This indicates that the GSS in 2013 has increased at a lower rate than the MAWE relative to 2012.

From the mid-1970s through to the mid-1990s, the median GSS declined steadily relative to MAWE. From the mid-1990s through to 2001, median GSS (relative to MAWE) experienced growth, peaking at 85.8 per cent in 2001 before declining to 79.7 per cent in 2006. From 2007, median GSS began to grow steadily relative to MAWE; a trend which persisted through to the 2009 figure of 83.0 per cent. In 2010, this figure declined to 79.8 per cent; declining further to 77.8 per cent in 2012 and 74.6 in 2013.

The 2013 median GSS of \$52,500 represents a 0.9 per cent (\$500) increase relative to the 2012 median GSS of \$52,000. Over the same period, MAWE grew by 5.2 per cent (\$3,500), more than the increase in median GSS in both nominal and percentage terms.

The average annual increase in MAWE since 1977 has been 5.9 per cent, compared with an average annual increase in median GSS of 5.1 per cent. This indicates that, over the long term, the growth in median GSS has been lower than the growth in MAWE. This being said, it is important to note that average weekly earnings (for males and females) have been positively affected over time as the proportion of higher education graduates in the workforce increases. As the salaries of higher education graduates grow over time, average weekly earnings for the population will increase accordingly. It is also important to note that MAWE only represents approximately half of the working population. As the gender composition in higher education or in the workforce varies over time, fluctuation in the time series is expected.

Table 4: Annual rate of male average weekly earnings (MAWE) and median starting salaries for all bachelor degree graduates aged less than 25 and in first full-time employment (GSS), 1977-2013 (\$, '000)°†

	Annual rate of MAWE	Median GSS (All)	GSS (All) as % of MAWE
1977	9.6	9.6	100.0
1979	11.3	10.9	96.5
1980	12.5	11.8	94.4
1981	14.1	13.2	93.6
1982	16.5	14.9	90.3
1983	17.8	15.9	89.3
1984	19.6	17.2	87.8
1985	20.5	18.2	88.88
1986	22.1	19.8	89.6
1987	23.3	20.9	89.7
1988	24.9	23.0	92.4
1989	26.8	24.0	89.6
1990	28.7	24.9	86.8
1991	30.0	25.3	84.3
1992	31.1	25.7	82.6
1993	31.8	25.5	80.2
1994	32.5	26.0	80.08
1995	33.9	27.0	79.6
1996	34.8	28.0	80.5
1997	35.7	29.0	81.2
1998	37.2	30.0	80.6
1999	38.0	31.0	81.6
2000	39.2	33.0	84.2
2001	40.8	35.0	85.8
2002	42.9	35.5	82.7
2003	45.1	37.0	82.0
2004	46.6	38.0	81.6
2005	48.9	40.0	81.8
2006	51.2	40.8	79.7
2007	53.7	43.0	80.1
2008	55.6	45.0	80.9
2009	57.8	48.0	83.0
2010	61.4	49.0	79.8
2011	64.0	50.0	78.1
2012	66.8	52.0	77.8
2013	70.3	52.5	74.6

[&]quot; See <u>Graduate Salaries 2013 Explanatory Notes</u> (Sections 3 and 9).

GSS and Average Weekly Earnings by sex

Examining median starting salaries for males and females as a percentage of MAWE illustrates that 2013 figure for females (73.4 per cent of the MAWE) represents a 1.5 percentage point decrease from 2012 (74.9 per cent) and the 2013 figure for males (78.2 per cent of the MAWE) represents a 4.1 percentage points decrease from 2012 (82.3 per cent) (see *Supplementary Table B in Graduate Salaries 2013 Tables and Figures*).

The median starting salary for females as a percentage of Female Average Weekly Earnings (FAWE) was equal to 115.3 per cent (see Figure 1). This ratio has witnessed a decline since 2008 suggesting that the gap between the average salary earned by female population and the starting salaries earned by female graduates is decreasing.

The median starting salary for males as a percentage of Male Average Weekly Earnings (MAWE) was equal to 78.2 per cent.

Examining the actual GSS against sex specific AWE over the past decade (see supplementary Figure C in Graduate Salaries 2013 Tables and Figures) reveals a consistent trend that while the median GSS for male graduates aged less than 25 and in their first full-time employment are considerably lower than the average earnings of employed males in the wider Australian population, the situation is reversed for female graduates with the median GSS for those aged less than 25 and in their first full-time employment, considerably higher than the average earnings of employed females in the wider Australian population.

[†] Data from 1978 are incompatible with those from other years and have been excluded from the series.

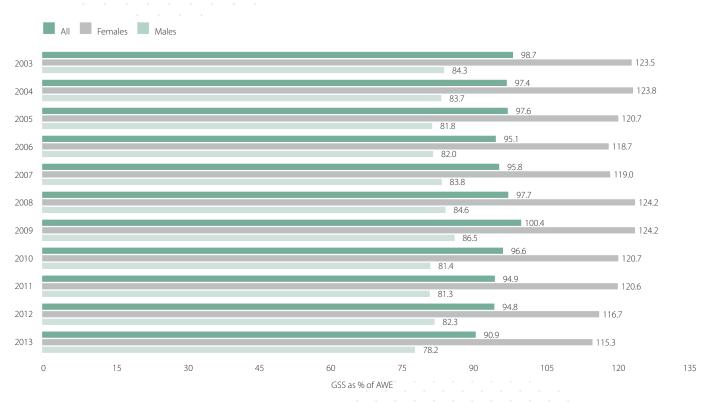


Figure 1: Median starting salary for bachelor degree graduates aged less than 25 and in first full-time employment (GSS) as a percentage of average weekly earnings (AWE) by sex, 2004-2013

4.0

IMPACT OF AGE AND EMPLOYMENT EXPERIENCE ON GRADUATE STARTING SALARIES

Older graduates (i.e. aged 25 and over) can be seen to be a different, much less homogenous cohort than those graduates aged less than 25 who went directly from secondary school to higher education with little or no previous full-time employment experience.

Older graduates may be returning to study in order to gain qualifications that will allow them to advance within their current employment, or they may be returning to study with the intention of changing to a different job or a different career path altogether. Additionally, graduates aged 25 years and over and in their first full-time employment are likely to have been previously engaged in part-time or casual employment.

This chapter examines the impact of age, and employment experience on graduate salaries.

Employment experience and salaries of older graduates

Median salaries for graduates aged 25 and over with previous full-time employment experience are typically higher than those for graduates aged less than 25 and in their first full-time employment (see Table 5). However, a direct comparison of salary levels between older graduates with previous full-time employment experience and younger graduates in their first full-time employment is confounded by the fact that it is unclear whether age or previous full-time employment experience is responsible for higher salary levels. Table 5 subsequently includes a third group – those graduates aged 25 and over and in their first full time employment.

Among older graduates, those with previous work experience reported a marginally higher median salary than those without any previous full-time work experience (\$58,000 compared with \$57,000).

As shown in Table 5:

- The median salary of older graduates (25 and over) with previous full-time work experience was \$1,000 (or 1.8 per cent) more than graduates in the same age range in their first full-time employment.
- In 2013, the salary for male graduates aged 25 and over was \$60,000, irrespective of work experience.
- Female graduates aged 25 and over with prior full-time work experience earned \$1,000 more than their equivalent cohort with no prior work experience.

The majority of bachelor degree graduates aged 25 and over who are in full-time employment at the time of the GDS have some previous full-time employment experience behind them at the time of their survey (see *supplementary Table D in Graduate Salaries 2013 Tables and Figures*).

In 2013:

- 72.2 per cent of full-time employed graduates aged 25 and over were not in their first full-time employment.
- Female graduates aged 25 and over were more likely than their male counterparts to have previous full-time employment experience (72.5 per cent and 71.9 per cent respectively see supplementary Table E in Graduate Salaries 2013 Tables and Figures).

Among older graduates, those with previous work experience reported a marginally higher median salary than those without any previous full-time work experience

When comparing median salaries of graduates aged 25 years and over by field of education, statistical significant differences based on their level of full-time work experience were observed in 12 of the 23 fields of education, the majority of which revealed a pay advantage for graduates who had some previous full-time employment (see supplementary Table D in Graduate Salaries 2013 Tables and Figures).

The largest difference was observed among earth science graduates where those who had a previous full-time position earned a median starting salary \$18,500 higher than those without previous experience, followed by:

- accounting (\$10,000),
- · art and design and computer science (\$9,500), and
- economics and business (\$8,000).

A notable pay advantage which paradoxically favoured graduates without any previous full-time work experience was observed in dentistry graduates (\$21,000). This is based on a small number of responses and should be interpreted with caution.

While these salary figures alone are not sufficient to confirm a definite salary advantage for graduates with full-time employment, they do suggest that previous full-time employment is associated with higher median salaries for graduates from certain fields of education. It should also be noted that graduate salaries are likely to be influenced by a range of factors additional to previous employment (including, for example, the graduate's skills and abilities, the level of responsibility inherent in the role and fixed pay grades for particular roles within certain organisations) and

that previous full-time experience in a field not directly relevant to their current employment may not provide graduates with a pay advantage relative to those graduates with no full-time employment experience.

When examining the median salaries of graduates aged 25 and over and with previous full-time employment, by sex and field of education (see supplementary Table E in Graduate Salaries 2013 Tables and Figures), statistically significant sex differences were observed in 9 out of the total 23 field of education, all of which revealed a male pay advantage.

Among older graduates overall (see supplementary Table E in Graduate Salaries 2013 Tables and Figures), males with previous full-time work experience reported a \$4,000 pay advantage over females with previous full-time work experience and

Table 5: Summary of median salaries for bachelor degree graduates aged less than 25, and 25 and over, in first full-time employment and with previous full-time employment experience, 2003-2013 (\$, '000)^x

		25 and over ull-time employment						Aged less than 25 and in first full-time employment										
	Male	Female	All		٠	Male	•	Female	•	- All			Male	•	Female			All
2003	42.0	40.0	40.0			42.0	• •	38.6		40.0			38.0		36.3	٠		37.0
2004	45.0	40.0	41.5	•		43.0		40.0		41.0	٠	٠	39.0	٠	38.0		• .	38.0
2005	45.5	42.0	43.0			43.0		40.1		42.0			40.0		39.0			40.0
2006	47.6	43.0	45.0	٠	٠	45.0	٠	43.0	٠	43.5	٠		42.0	٠	40.0	٠	• 1	40.8
2007	50.0	45.0	46.4			46.0		43.0		45.0			45.0		42.0			43.0
2008	51.0	47.5	50.0			50.0		46.0		48.0			47.0		45.0			45.0
2009	55.0	50.0	52.0			52.0		48.8		50.0			50.0		47.0			48.0
2010	58.0	52.0	54.0	۰	۰	53.0	•	50.0	٠	52.0	٠		50.0	•	48.0		* 1	49.0
2011	60.0	54.0	56.0			55.0		52.0		53.0			52.0		50.0		. !	50.0
2012	60.0	55.0	57.0	•		57.0		53.0	٠	55.0	٠	٠	55.0	٠	50.0		• [52.0
2013	60.0	56.0	58.0			60.0		55.0	٠	57.0			55.0		51.6		. !	52.5

See Graduate Salaries 2013 Explanatory Notes (Section 2).

males without any work experience reported a \$5,000 pay advantage over females without any previous full-time work experience.

Age and starting salaries

By comparing the median starting salaries of bachelor degree graduates aged less than 25 and in their first full-time employment with those bachelor degree graduates aged 25 and over and also in their first full-time employment, any potential labour market advantage gained from prior full-time work experience is largely negated. This permits any differences in median GSS to be investigated in relation to the age group of the graduate. It should be noted that the cohort of graduates aged 25 and over and with no previous full-time experience is relatively small (n = 2,966) when compared to graduates under 25 in first full time job (n=11,022), which limits the number of field of education comparisons that can be made.

On average, it appears that older graduates do tend to earn higher median starting salaries than their younger counterparts, with graduates aged 25 and over and in their first full-time employment earning a median starting salary \$4,500 higher than their younger counterparts (see *supplementary Table E in Graduate Salaries 2013 Tables and Figures*). This suggests that having no previous full-time employment but simply being older can have a positive impact on median starting salaries for graduates.

In 2013 over a quarter (27.7 per cent) of all the bachelor degree graduates aged 25 and over and in their first full time employment had already completed an undergraduate or postgraduate degree, compared to 5.9 per cent of graduates aged under 25 and in their first full time employment which may also have impact on starting salary negotiations.

Graduates aged less than 25 who commenced their higher education immediately after completing secondary school may not have had the life experience, both professionally and personally, that older graduates possess. Moreover, graduates who returned to study at an older age may be more outcomes focused than their younger counterparts. Factors such as these are not easily quantifiable; however they may contribute to some older graduates securing higher median starting salaries.

Similar findings were observed in a longitudinal study of higher education graduates in the United Kingdom (Purcell, Wilton & Elias 2003), with graduates aged less than 25 typically earning less in their first full-time job after graduation than their older counterparts. When these same graduates were re-surveyed seven years later the situation was reversed: the cohort of 'younger' graduates was earning more than their older counterparts. This suggests that, while older graduates tend to earn a higher median starting salary, it does not necessarily guarantee that they will maintain this salary advantage throughout their careers. Later earnings would likely be affected by their job performance, professional development, long-term career choices and a range of other factors outside the scope of the GDS.

SALARIES BY LOCATION

Differences in median GSS between States and Territories may be attributable to a range of factors,

This chapter examines graduate starting salaries within various geographic locations, including state of employment, capital cities and regional areas.

In 2013, median starting salaries for bachelor degree graduates aged less than 25 and in their first full-time employment varied by up to \$7,000 based on the Australian State or Territory in which their employment was based (see Table 6).

Graduates employed in Western Australia earned the highest median starting salary in 2013 (\$57,000). This was followed by the Australian Capital Territory (\$56,000) and the Northern Territory (\$55,500). Graduates employed in these three state and territories were also the top earners in 2012, albeit in a slightly different order. Graduates employed in Victoria earned the lowest median starting salary (\$50,000) in 2013.

Differences in median GSS between States and Territories may be attributable to a range of factors, including economic forces, such as the resources boom and the lingering effects of the global economic downturn. For example, the Western Australian graduate workforce is composed of a relatively higher proportion of engineering graduates (ranked as the third highest paid starting salary - see Table 3) whereas in Victoria, economics and business graduates (ranked 18th in terms of starting salary) were in relative majority.

The availability and demand of courses in particular geographic locations can also impact on starting salaries. For instance, the typically higher-paying fields of medicine and dentistry are not offered by higher education institutions in every State and Territory. This is further exacerbated by the notable difference in the movement of graduates form the location of their study to the location of their employment (see supplementary Table F in Graduate Salaries 2013 Tables and Figures). For bachelor degree graduates aged less than 25 and in their first full-time employment, the percentage in full-time employment in their State or Territory of study in 2013 was lowest for Tasmania (69.1 per cent). The percentage of these graduates in full-time employment in their State or Territory of study was highest for the Northern Territory (94.1 per cent) followed by Victoria (88.3 per cent), Western Australia (87.2 per cent), South Australia (84.9 per cent), New South Wales (82.9 per cent), Queensland (81.2 per cent) and the Australian Capital Territory (75.5 per cent). Note that the figures for Northern Territory are based on a low number of responses and must be interpreted with caution.

Statistically significant differences in starting salaries between males and females were observed in six States and Territories (the exceptions were Tasmania and the Northern Territory), all revealing a male pay advantage (see Table 6). The largest significant difference was observed between male and female graduates employed in Western Australia, where males earned a median starting salary \$9,100 greater than females, followed by Queensland (\$5,900) and NSW (\$5,000). The salary discrepancy between males and females was lowest in the Australian Capital Territory at \$1,900.

Differences in median GSS between States and Territories do not necessarily reflect differences in average earnings within the wider population for each State and Territory. A clearer picture of GSS in the economic and demographic context of each State and Territory can be obtained by examining median GSS as a percentage of AWE.

Table 6 compares median GSS to the annual rate of average weekly earnings (AWE) for males and females individually. These figures should be interpreted with a degree of caution because the composition of the labour force may make some median GSS figures seem overly positive in comparison (see *Graduate Salaries 2013 Explanatory notes*).

In 2013, male graduates earned median starting salaries between 70.7 per cent (in the Australian Capital Territory) and 86.2 per cent (in South Australia and Tasmania) of MAWE. Median starting salaries for female graduates, on the other hand, exceeded FAWE in every State and Territory with the exception of the Australian Capital Territory. Female graduates in Tasmania earned the highest median starting salary relative to FAWE (130.7 per cent) followed by South Australia (126.1 per cent) while female graduates in the Australian Capital Territory earned the lowest starting salary relative to FAWE (90.3 per cent), as has also been the case in recent years.

When starting salaries for all bachelor degree graduates aged less than 25 and in their first full-time employment are compared to AWE for all persons in their State or Territory of employment, relative graduate earnings range from 79.9 per cent of AWE in the Australian Capital Territory to 106.2 per cent of AWE in Tasmania.

Median starting salaries of graduates employed in regional areas (those outside capital cities) in 2013 were again higher than those for their counterparts employed in capital cities (\$54,000 compared with \$52,000 – see *supplementary Table G* in Graduate Salaries 2013 Tables and Figures). Female graduates employed in regional areas earned a median starting salary \$3,000 more than female graduates employed in capital cities (\$53,000 compared with \$50,000), while male graduates employed in regional areas earned \$1,000 more than their capital city counterparts (\$56,000 compared with \$55,000).

Table 6: Median starting salaries for bachelor degree graduates aged less than 25 and in first full-time employment by State or Territory of employment, and comparison of all graduates to the average weekly earnings (AWE) for that State or Territory, 2013 (\$, '000)"

			Male			Female			All	
	GSS Median Salary	AWE (State)	GSS as % of AWE	GSS Median Salary	AWE (State)	GSS as % of AWE	GSS Median Salary	AWE (State)	GSS as % of AWE	Sig. [sex]
NSW	55.0	68.3	80.5	50.0	46.8	106.9	52.0	57.7	90.1	**
Vic.	52.0	66.6	78.0	50.0	42.8	116.7	50.0	54.9	91.1	**
Qld	56.0	70.4	79.5	50.1	42.4	118.3	52.5	56.1	93.5	**
SA	55.0	63.8	86.2	52.0	41.2	126.1	54.0	52.4	103.0	**
WA	64.1	85.4	75.0	55.0	47.0	117.1	57.0	67.4	84.5	**
Tas.	50.0	58.0	86.2	52.0	39.8	130.7	52.0	49.0	106.2	
NT	63.0	75.4	83.5	54.0	52.4	103.0	55.5	64.3	86.3	
ACT	56.9	80.4	70.7	55.0	60.9	90.3	56.0	70.1	79.9	**
TOTAL	55.0	70.3	78.2	51.6	44.8	115.3	52.5	57.7	90.9	

[&]quot; See Graduate Salaries 2013 Explanatory Notes (Sections 1, 2, 3 and 5).

^{* =} difference statistically significant at 5 per cent level

^{** =} difference statistically significant at 1 per cent level

When examined by field of education, statistically significant differences in salary based on whether graduates were employed in capital cities or regional areas were observed in eight of the 23 fields of education under examination, with four favouring capital cities, and four favouring regional areas. The largest absolute difference of \$25,000 was reported among dentistry graduates in favour of graduates employed in capital cities, followed by Optometry graduates in rural areas with a salary \$15,000 higher than those in capital cities. These figures are based on low number of responses and must be interpreted with caution.

When examined over time (see Table 7), it can be seen that the greatest difference in median starting salaries between capital cities and regional areas in the past decade was observed in 2006, when median

capital city GSS fell to 95.2 per cent of median regional area GSS. The second lowest value in this series was observed in 2011 (96.2 per cent), followed closely by 96.3 per cent in 2013. The value of a median capital city GSS only exceeded the value of a median regional area GSS once in this 14-year period (in 2001, with a value of 100.9 per cent).

The situation is different, however, when examined by sex. For the past 14 years, the median starting salary for female graduates employed in regional areas has consistently exceeded the median starting salary for female graduates employed in capital cities with relative values of a median capital city GSS ranging from 94.3 per cent of a median regional area GSS in 2013 to 97.8 per cent in 2008. In 2013, the capital city GSS for females was unchanged from 2012, while the regional GSS increased by \$1,000.

The median starting salary for male graduates employed in regional areas has only exceeded the median starting salary for male graduates employed in capital cities for five years out of the last 14 (2004–2005 and 2011–2013). In 2013, the capital city GSS for males increased by \$1,000 from 2012, while the regional GSS decreased by \$1,000.

When comparing GSS between capital cities and regional areas, it is important to note that the majority of corporate head offices are located in capital cities (particularly Sydney and Melbourne), as well as the fact that graduates from certain fields may be paid a salary loading to work in more remote areas. This may also contribute to the relatively high median staring salaries earned by graduates employed in Western Australia and may also help to account for the higher overall median starting salary earned by graduates employed in regional areas.

Table 7: Median starting salaries of bachelor degree graduates in first full-time employment and aged less than 25, by capital city / regional area, 2000-2013 (\$, '000)°

		Male	S			Fema	ales			Al	I	
	Capital City	Regional	Total	Capital as % of regional	Capital City	Regional	Total	Capital as % of regional	Capital City	Regional	Total	Capital as % of regional
2000	35.0	34.0	34.5	102.9	32.0	33.1	32.0	96.6	32.5	33.5	33.0	97.0
2001	36.0	35.0	36.0	102.9	33.6	34.5	34.0	97.4	35.0	34.7	35.0	100.9
2002	37.0	37.0	37.0	100.1	35.0	36.0	35.0	97.2	35.4	36.0	35.5	98.2
2003	38.0	38.0	38.0	100.0	36.0	37.0	36.3	97.3	36.5	37.6	37.0	97.2
2004	39.0	39.5	39.0	98.7	37.0	38.9	38.0	95.2	38.0	39.0	38.0	97.4
2005	40.0	40.1	40.0	99.6	38.5	40.0	39.0	96.3	39.5	40.0	40.0	98.8
2006	42.0	42.0	42.0	100.0	40.0	42.0	40.0	95.2	40.0	42.0	40.8	95.2
2007	45.0	45.0	45.0	100.0	42.0	43.0	42.0	97.7	43.0	43.5	43.0	98.9
2008	47.1	47.0	47.0	100.3	45.0	46.0	45.0	97.8	45.0	46.0	45.0	97.8
2009	50.0	50.0	50.0	100.0	46.0	48.0	47.0	95.8	47.5	48.0	48.0	99.0
2010	50.0	50.0	50.0	100.0	48.0	50.0	48.0	96.0	48.8	50.0	49.0	97.7
2011	52.0	54.0	52.0	96.3	49.3	51.0	50.0	96.7	50.0	52.0	50.0	96.2
2012	54.0	57.0	55.0	94.7	50.0	• 52.0	50.0	96.2	52.0	53.0	52.0	98.1
2013	55.0	56.0	55.0	98.2	50,0	53.0	51.6	94.3	52.0	54.0	52.5	96.3

[&]quot; See Graduate Salaries 2013 Explanatory Notes (Section 2).

Ranking fields of education by median graduate starting salary (GSS) provides a useful basis for comparing salary data, both in the current year and over the long term. Table 8 ranks fields of education from highest to lowest (1 to 23) according to its median GSS (see *supplementary Table H* in Graduate Salaries 2013 Tables and Figures for similar rankings for the period 1977–2013).

The majority of the fields of education under examination have shown a high level of stability in rankings over the past three decades. The top-ranked fields of dentistry, optometry, engineering and medicine have consistently been ranked highly since 1977, while the lower-ranked fields of art and design, and pharmacy have also maintained consistent rankings over the years (see supplementary Table H in Graduate Salaries 2013 Tables and Figures).

Examining the rankings for 2013, the field of social sciences saw the biggest positive change, moving from 19th in 2012 to 12th in 2013, followed by accounting and psychology, both moving from 15th in 2012 to 12th in 2013.

Biological sciences showed the largest negative shift, moving from 12th in 2012 to 19th in 2013.

The difference in median GSS between the highest-ranked field for 2013 (dentistry at \$80,000) and the lowest-ranked field (pharmacy at \$39,000) was \$41,000, the same difference as observed in 2012 but considerably higher than the difference in 2000 (\$25,000).

The difference in median GSS in the upper half of the fields was \$27,000, between top-ranked dentistry (\$80,000) and eleventh ranked computer science (\$53,000 – see Table 8).

This is over double the difference in median GSS for the remaining lower-ranked fields of \$11,000, between accounting, psychology, social sciences, agricultural science and social work (ranked equal 12th at \$50,000) and bottom-ranked pharmacy (\$39,000).

It should be noted that median salary rankings, while useful, can also be somewhat misleading. Graduate salary data collected via the GDS can potentially include both overtime and above-award payments. This means that while median salary levels as reported do accurately reflect real graduate earnings at the time of the survey, they do not necessarily reflect award wage levels (where these may be in place).

When fields of education are ranked according to median hourly rate (calculated by dividing reported earnings by reported working hours), we see that the top four ranked fields in terms of GSS also had the highest average hourly rate (see Table 9).

The majority of the fields of education under examination have shown a high level of stability in rankings over the past three decades.

Table 8: Fields of education ranked according to median starting salary for bachelor degree graduates aged less than 25 in first full-time employment, 2013°

Rank in 2012	No. of graduates in 2013	Median salary in 2013 (\$, '000)	Field of Education	2013 Rank
1	63	80.0	Dentistry	1
2	22	70.0	Optometry	2
4	1,271	64.0	Engineering	3
5	388	60.0	Medicine	4
3	87	60.0	Earth Sciences	4
7	1,032	57.0	Education	6
9	304	55.0	Law	7
8	82	55.0	Physical Sciences	7
6	59	55.0	Mathematics	7
11	1,808	54.0	Paramedical Studies	10
10	325	53.0	Computer Science	11
15	781	50.0	Accounting	12
15	253	50.0	Psychology	12
. 19	118	50.0	Social Sciences	12
12	107	50.0	Agricultural Science	12
12	97	50.0	Social Work	12
17	284	49.2	Architecture & Building	17
17	1,983	49.0	Economics, Business	18
12	421	48.0	Biological Sciences	19
20	68	46.0	Veterinary Science	20
20	922	45.0	Humanities	21
. 22	269	40.0	Art & Design	22
23	278	39.0	Pharmacy	23

¤ See Graduate Salaries 2013 Explanatory Notes (Sections 2 and 12)

Examining Table 9 further, some notable differences between the respective rankings by median GSS and hourly rate are evident.

- While biological sciences ranked 19th in terms of GSS (\$48,000), they ranked 14th in terms of hourly rate (\$24.00) an hour five positions higher.
- Similar results were seen for computer science graduates (four positions higher) and paramedical studies (three positions higher).
- · Physical sciences and agricultural science graduates each ranked six positions lower by hourly rate than by GSS, moving from 7th to 13th and 12th to 18th respectively.

Earth science and medicine graduates represented the highest average number of hours worked for any field of education in 2013; working at an average of 45 hours per week.

The average number of hours worked by graduates has remained stable over the past 20 years, with average working hours per week fluctuating between 40 and 41 since 1991 (GCA 2004-05; GCA 2006-12; GCCA 1989-93; GCCA 1994-2003).

Table 9: Fields of education ranked according to calculated hourly rate for bachelor degree graduates aged less than 25 and in first full-time employment, 2013^a

2013 rank b	oy hourly rate (2012 rank)	Mean hours	Hourly rate (\$)	Median GSS (\$, '000)	Rank by median GSS
1(1)	Dentistry	39	38.5	80.0	• • 1
2(2)	Optometry	38	35.4	70.0	2
3(4)	Engineering	42	30.2	64.0	3
4(3)	Earth Sciences	45	27.5	60.0	4
5(6)	Education	40	27.4	57.0	6
6(9)	Medicine	45	26.9	60.0	4
7(5)	Mathematics	41	26.4	55.0	7
7(10)	Paramedical Studies	39	26.4	54.0	10
7(8)	Computer Science	39	26.4	53.0	11
10(10)	Law	42	25.6	55.0	7
11(12)	Social Work	37	25.3	50.0	12
12(15)	Psychology	39	24.6	50.0	12
13(7)	Physical Sciences	42	24.5	55.0	7
14(13)	Biological Sciences	38	24.0	48.0	19
14(16)	Accounting	40	24.0	50.0	12
16(17)	Social Sciences	39	23.6	50.0	12
17(18)	Economics, Business	40	23.4	49.0	18
18(13)	Agricultural Science	43	22.8	50.0	12
19(19)	Architecture & Building	41	22.2	49.2	17
20(20)	Humanities	40	22.0	45.0	21
21(20)	Veterinary Science	43	21.8	46.0	20
22(22)	Art & Design	39	20.0	40.0	22
23(23)	Pharmacy	39	. 19.2	39.0	23
	MALE	41	25.8		
	FEMALE	40	25.0		
	Total	40	25.3		

[&]quot; See <u>Graduate Salaries 2013 Explanatory Notes (Sections 2 and 12)</u>

SALARY GROWTH

By showing the median GSS in 2012 as a percentage of the median GSS in 1977... the growth in median GSS can be measured over time against a common benchmark.

Table 10: Growth in male average weekly earnings (MAWE) relative to 1977 MAWE, growth in median starting salaries for bachelor degree graduates aged less than 25 and in first full-time employment (GSS) relative to 1977 GSS, 1977–2012 (%)°†

	MAWE as % of 1977 MAWE	GSS as % of 1977 GSS	Difference (percentage points)
1977	100.0	100.0	0.0
1979	117.7	113.5	4.2
1980	130.2	122.9	7.3
1981	146.9	137.5	9.4
1982	171.9	155.2	16.7
1983	185.4	165.6	19.8
1984	204.2	179.2	25.0
1985	213.5	189.6	23.9
1986	230.2	206.3	23.9
1987	242.7	217.7	25.0
1988	259.4	239.6	19.8
1989	279.2	250.0	29.2
1990	299.0	259.4	39.6
1991	312.5	263.5	49.0
1992	324.0	267.7	56.3
1993	331.3	265.6	65.7
1994	338.5	270.8	67.7
1995	353.1	281.3	71.8
1996	* 362.5	291.7	70.8
1997	372.9	302.1	70.8
1998	387.5	312.5	75.0
1999	395.8	322.9	72.9
2000	408.3	343.8	64.5
2001	425.0	364.6	60.4
2002	446.0	369.8	76.2
2003	469.8	385.4	84.4
2004	485.4	395.8	89.6
2005	509.4	416.7	92.7
2006	533.3	425.0	108.3
2007	559.4	447.9	• • • • • 111.5
2008	579.2	468.8	
2009	601.9	500.0	101.9
2010	639.7	510.4	129.3
2011	666.4	520.8	145.6
2012	696.0	541.7	154.3
2013	732.5	546.4	186.1

[&]quot; See Graduate Salaries 2013 Explanatory Notes (Sections 2, 3 and 9).

 $^{^{\}dagger}$ data from 1978 are incompatible with those from other years and have been excluded from the series.

By showing the median GSS in 2013 as a percentage of the median GSS in 1977 and MAWE in 2013 as a percentage of MAWE in 1977, the growth in median GSS can be measured over time against a common benchmark⁸. It is important to note that this analysis does not address the impact of consumer price inflation on salary levels and is based solely on nominal growth in median GSS and MAWE over time.

In 2013, the median GSS was equivalent to 546.4 per cent of the median GSS in 1977, while MAWE in 2013 was equivalent to 732.5 per cent of MAWE in 1977 (see Table 10).

Since 1977, MAWE has grown at a greater rate than the median GSS, with the difference between the two increasing over time. In 2013, there was a difference of 186.1 percentage points between the GSS and MAWE growth indices; the highest gap recorded since the beginning of this series.

Examining field of education differences (see *supplementary Table J in Graduate Salaries 2013 Tables and Figures*), we see:

- The median starting salary for law graduates in 2013 was equivalent 964.9 per cent of the median starting salary for law graduates in 1977, compared with an average of 546.4 per cent across all fields of education
- The law median GSS continued to exhibit growth that exceeded that of MAWE as has been the case for the thirty-six year period of this table

Looking at the average GSS growth since 1977, fields of education that exhibit above average growth in 2013 were:

- engineering (633.7 per cent),
- earth sciences (618.6 per cent),
- physical sciences (585.1 per cent),
- mathematics (578.9 per cent),
- accounting (574.7 per cent),
- education (570.0 per cent),
- architecture and building (565.5 per cent), and
- pharmacy (557.1 per cent).

Overall, medicine graduates have experienced the lowest growth in their median starting salary between 1977 and 2013, with a median GSS in 2013 equivalent to 451.1 per cent of that in 1977.

The fields of paramedical studies, optometry, and art and design were disaggregated for reporting purposes for the first time in 1988. GSS growth indices covering the period 1988–2013 for these fields of education are presented in *supplementary Table K in Graduate Salaries 2013 Tables and Figures*.

Examining the median starting salary growth indices covered by the period 1988–2013, we see:

 Optometry (266.2 per cent) and paramedical studies (232.8 per cent) were the two fields of education where the growth exceeded the average growth (228.0 per cent) since 1988. • The growth in median starting salaries for male optometry graduates (301.9 per cent) exceeded the growth in MAWE between 1988 and 2013, which was 282.4 per cent.

Briefly looking at employment sectors, the highest growth in 2013 median GSS relative to 1977 median GSS (see supplementary Table J in Graduate Salaries 2013 Tables and Figures) was for:

- law graduates in the professional private practice sector (1018.5 per cent), followed by
- humanities graduates (732.4 per cent) in the professional private practice sector, and
- earth sciences graduates (663.3 per cent) and engineering (650.0 per cent) in the industry and commerce sector.

Relative to 1977, graduates employed in the professional private practice sector have experienced the highest level of growth in their median starting salary (646.3 per cent – supplementary Table J in Graduate Salaries 2013 Tables and Figures). Conversely, graduates employed in the industry/commerce sector have experienced the least growth (531.9 per cent).

⁸ Median GSS and MAWE for 1977 are represented as 100.0 per cent in each respective growth index.

8.0 SALARIES PAID TO POSTGRADUATES

An examination of salaries paid to postgraduates is not as straightforward as an examination of salaries paid to younger bachelor degree graduates in their first fulltime jobs

An examination of salaries paid to postgraduates is not as straightforward as an examination of salaries paid to younger bachelor degree graduates in their first full-time jobs. Postgraduates may have returned to study at any stage of their careers, so their salaries cannot be analysed in a simple 'first full-time employment' manner⁹.

As shown in Table 11, of postgraduates who were in full-time employment at the time of the 2013 AGS:

- Postgraduate diploma/certificate graduates earned a median salary of \$72,000.
- Masters by coursework graduates earned a median salary of \$80,000.
- Graduates that completed a masters degree by research earned a median salary of \$80,000.
- PhD graduates also earned a median salary of \$80,000.

Statistically significant salary differences based on postgraduate level of award were observed in 14 of the 23 fields of education under examination which contained a sufficient number of responses to allow comparisons to be made.

- The largest statistically significant difference was observed for dentistry graduates, with \$50,000 separating the median salaries of masters by coursework graduates (\$150,000) and postgraduate diploma/certificate graduates (\$100,000).
- Large differences between postgraduate levels were also observed for:
 - education graduates (\$34,000)
 - o architecture and building (\$32,500)
 - economics & business and law (\$28,000)
 - o pharmacy (\$27,300)
 - o social work (\$27,000).

The least statistically significant difference was observed for psychology graduates with \$6,000 separating the median salaries of diploma/certificate/masters by coursework graduates (\$70,000) and PhD graduates (\$76,000).

Examining growth in median starting salaries since 1994 by level of postgraduate award, we see the highest growth for postgraduate diploma/certificate graduates and masters by research graduates with a growth of 100.0 per cent (see *supplementary Table N in Graduate Salaries 2013 Tables and Figures*).

Table 11 illustrates that postgraduate diploma/certificate graduates from some fields of education earned a higher median starting salary than masters by coursework graduates from the same field.

This was particularly noticeable for graduates from the fields of:

- pharmacy (\$27,300),
- architecture and building (\$22,500),
- mathematics (\$13,000), and
- accounting (\$10,000).

These salary differences may be attributable, at least in part, to the nature of the particular courses offered at each level of award within particular higher education institutions, as well as differences between the individual graduates themselves (e.g. previous employment and educational history, career goals and ambitions). Moreover, while postgraduate diploma/certificate graduates from these fields of education earned higher median salaries than their masters by coursework counterparts in 2013, these salary figures tend to fluctuate over the years and are by no means typical for each of these fields of education.

As observed in previous years, male postgraduates earned a higher median salary than female postgraduates at all levels of award (see Table 11). Further:

- The female median salary was lowest relative to the male median salary at the masters coursework award level, where female graduates earned a median salary equivalent to 83.3 per cent of the median salary earned by male graduates (or \$15,000 lower in nominal terms), followed by postgraduate diploma/certificate award graduates at 86.3 per cent (or \$11,000).
- Conversely, the greatest parity between sexes is evident at the PhD award level, with a median female salary equivalent to 98.9 per cent that of male graduates (or \$900 lower in nominal terms). In relative terms, PhD graduates have experienced the greatest sex parity in median salaries earned by postgraduates since 2007.

While it may be expected that PhD graduates would be earning more than masters coursework graduates, in fact they are equal. The differing study and employment profiles of postgraduates at different award levels may help to explain this apparent anomaly.

Compared with masters coursework graduates, PhD graduates were much more likely to be in their first full-time employment in 2013 (30.1 per cent compared with 22.9 per cent). They were also much less likely to have been in full-time employment with their current employer in their final year of study (46.8 per cent of masters coursework graduates compared with 29.1 per cent of PhD graduates) and were much more likely to have studied on a full-time basis (34.3 per cent of masters coursework graduates compared with 64.5 per cent of PhD graduates) (see supplementary Table O in Graduate Salaries 2013 Tables and Figures).

Table 11: Median salaries for postgraduates in full-time employment by level of award and field of education, 2013 (\$, '000)°^{1§}

	Di	raduate iploma/ rtificate	Cou	Masters irsework	Masters I	Research		PhD	
Field of Education	\$	° N	* \$	N	\$	° N	\$	· N	Sig.
Accounting	75.0	190	65.0	299	†	†	85.5	• 14	. **
Agricultural Science	65.0	62	70.0	78	†	†	80.0	45	*
Architecture & Building	75.5	84	53.0	392	†	†	85.5	13	**
Art & Design	60.0	68	57.0	114	66.0	39	75.0	36	**
Biological Sciences	75.0	193	70.0	236	72.0	19	74.0	221	
Computer Science	80.0	177	80.0	385	†	†	80.0	58	
Dentistry	100.0	43	150.0	11	t	†	135.0	10	*
Earth Sciences	80.0	35	80.0	41	†	†	81.0	18	
Economics, Business	87.8	1,583	98.0	2,996	70.0	12	82.0	168	**
Education	59.0	1,841	72.0	1,199	93.0	25	87.0	94	**
Engineering	100.0	323	95.0	478	75.0	27	80.0	182	**
Humanities	75.0	999	78.7	1,335	78.0	26	82.0	198	**
Law	66.0	659	85.0	669	†	†	94.0	27	**
Mathematics	88.0	78	75.0	42	†	†	78.2	27	
Medicine	80.0	131	88.5	91	82.0	16	81.5	92	
Optometry	90.0	31	†	†	†	†	†	†	
Paramedical Studies	72.0	1,959	80.0	1,870	90.0	30	82.5	185	**
Pharmacy	72.5	58	45.2	116	†	†	70.0	12	**
Physical Sciences	79.5	43	81.5	22	†	†	75.0	104	
Psychology	70.0	239	70.0	225	†	†	76.0	130	**
Social Sciences	80.0	144	80.0	124	†	†	81.0	36	
Social Work	68.5	131	63.0	233	t	t	90.0	17	**
Veterinary Science	†	t	90.0	14	†	†	+	†	
Male	80.0	3,591	90.0	5,139	80.0	132	80.0	829	
Female	69.0	5,476	75.0	5,836	78.0	115	79.1	865	
Total	72.0	9,073	80.0	10,977	80.0	247	80.0	1,694	

[&]quot;See Graduate Salaries 2013 Explanatory Notes (Sections 2, 5 and 12).

[†] Blank cells contain no, or fewer than 10 respondents.

Some figures in this table are based on small response numbers and consequently are subject to notable fluctuation.

[†] The heading 'Postgraduate Diploma/Certificate' includes graduate certificates and graduate/postgraduate diplomas.

⁼ difference statistically significant at 5 per cent level;

^{** =} difference statistically significant at 1 per cent level

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