



What price the clever country?

The costs of tertiary education in Australia



AMP.NATSEM INCOME AND WEALTH REPORT 21
ISSUE 21 - NOVEMBER 2008

NATSEM
UNIVERSITY OF CANBERRA

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Foreword

What price the clever country?

A tertiary qualification is today regarded as the pathway to success but it can come at a significant price. It's been almost 20 years since a free university education was replaced with the "pay for the benefits" system that exists today and the debts incurred by students now are sizeable. In fact, Australia has the third highest university fees out of all OECD countries, after the United States and Japan.

But meeting the cost of living is even tougher for students. The substantial costs associated with being a student, while often overlooked, can be the deciding factor when considering whether to hit the books or not.

The 21st AMP.NATSEM Income and Wealth Report, "What price the clever country?", focuses on Australian tertiary students today, who they are, how they meet the costs of living while they study and how their HECS debts get repaid.

The value of a tertiary qualification

Over the working lifetime of a university graduate the financial gain generated from income is more than \$1.5 million or 70 per cent more than those whose highest qualification is Year 12, even after taking into account the foregone earnings of students while they study.

Although the relationship between tertiary qualifications and the capacity to earn a higher income is strong, the report shows there is a clear discrepancy between the incomes of men and women of all groups.

The average income of male university graduates peaks at \$1,549 a week which is 84 per cent more than women in the same group who have a peak income of just \$842 a week.

But while the report shows the distinctive gap between earnings for men and women, the financial benefits of holding a degree or a certificate are substantial when compared to the income of both men and women without a qualification.

The earning capacity of a student

Making ends meet while studying is one of the biggest hurdles students face. Many students get their income from part-time or even full-time work, others get help from their families, while some rely on government benefits or scholarships - or a combination of these sources.

Nearly a third of full-time VET students and over half of university students have to balance study with part-time employment to meet the rent, pay the bills, purchase textbooks and buy groceries. There are even some who are juggling full-time education with full-time work; 6 per cent of uni students and 21 per cent of VET students fall into this category.

However, 30 per cent of full-time VET and 18 per cent of full-time university students get some relief, with the majority of their income coming from government benefits. But over the past decade the cost of rent and necessities such as food have increased much more rapidly than government benefits for students.

So how much income do students actually earn? On average in 2005-2006 the total income from all sources for a full-time student under 25 was \$243 a week compared to the same age group of full-time workers who took home almost triple that, at \$696 a week.

Meeting the cost of living

One-third of uni students live with and are dependant on their parents, for most others the harsh reality of study is much different. Almost a quarter of all university students are combining parenting with study themselves, 12 per cent live as a couple and 7 per cent alone while 11 per cent of current students live in share houses.

The report found that students under the age of 25 living in share houses struggle to make ends meet. On necessities alone they spend about \$100 a week more than their income, which could mean they are relying on family for help, dipping into savings or even using credit cards. Students in share houses have an average income of \$269 a week, which is one-sixth of that of full-time workers of the same age, at \$822 a week.

While the income of students and full-time workers differs dramatically, their living costs while in share houses are more similar.

In total students spend \$542 a week while full-time workers only spend another \$144, or \$686 a week. Students spend more on rent than workers but they roughly spend the same amount on food and non-alcoholic beverages and the dollar differences in the amounts they spend on utilities, personal care and mobile phones are minimal. Students have lower transport costs but they spend \$63 a week more on miscellaneous items related to their studies.

A HECS upon you

Almost 6 per cent of Australian households have a HECS debt hanging over their heads, and of that 31 per cent are younger households aged 25-29 while about 20 per cent are over 40.

For students graduating in 2007 the average total fee for their Bachelor degree was \$20,579, while for a student studying engineering it was almost one-third more, at \$27,608. The report also found that women on average pay about \$2,470 less than men for their degrees.

But how long does it actually take graduates to pay off their HECS debt? The report found that on average it takes a single man seven years to pay off a HECS debt while it takes one year longer for a single woman.

Not surprisingly the report predicted that for sole parents and mothers it's much longer. For a typical female sole parent with two children the debt remains unpaid, while for a male sole parent with two children it would take 14 years to repay the debt.

Conclusion

The cost of living while on a relatively low income is substantial for all students. And the biggest financial hurdle is achieving the balance between study, work and living expenses.

While university students can defer their HECS debt until they reach a certain earning capacity, they still struggle to pay off the debt with this report showing that on average it takes about seven years, while some will never repay the debt.

But even after the deduction of HECS repayments the income of most graduates is higher than those without a qualification.

There has been much discussion about the so called "instant gratification generation" but interestingly this generation is willing to forego income while studying, in recognition of the long-term financial gains.

What this latest AMP.NATSEM report shows is that it's all worthwhile - the majority of households with a HECS debt are among those with the highest incomes. The initial financial burden is more than made up for with the financial gains that follow over a lifetime.



Craig Meller

Managing Director, AMP Financial Services

Introduction

The opportunity to gain a tertiary qualification has come to be increasingly valued by many Australians. As the demand for more and higher qualifications increasingly characterises the job market, a post-school qualification often means more secure employment, a greater choice of jobs and a brighter financial future. Therefore, it is not surprising that more and more Australians are hitting the books at universities and TAFEs, and that the issue of access to tertiary education remains a key concern of governments and families.

While the benefits of a tertiary qualification hold substantial promise, there are also costs involved. Many Australians can look back to the days when an undergraduate university education was free, following the abolition of fees by the Whitlam Labor Government in 1972. However, in the 1980s arguments that students should be making a contribution to the costs of their education gained traction and in 1989 the Hawke Labor Government introduced the Higher Education Contribution Scheme (HECS) that formed the basis of the “pay for the benefits” system that exists today. The scheme allows students to defer their fees, repaying them as a proportion of their income only when it reaches a certain level.

Although HECS repayments are contingent on the income of the student, and usually begin only after they graduate and are working full-time, the debts incurred by students are sizeable - on average over \$20,500 for a bachelor degree. A great way to get young people talking is to ask how they feel about HECS debt! However, fees are only part of the cost of being a student. Although more often overlooked, the costs of *living as a student* can be heavy and are an important issue for prospective students and their families considering whether they can afford to study. Also, unlike repaying a HECS debt, they cannot be repaid at a more opportune later time, making life tough now for students who have to make ends meet as they combine study with work.

This issue of the *AMP.NATSEM Income and Wealth Report* focuses on Australian tertiary students today:

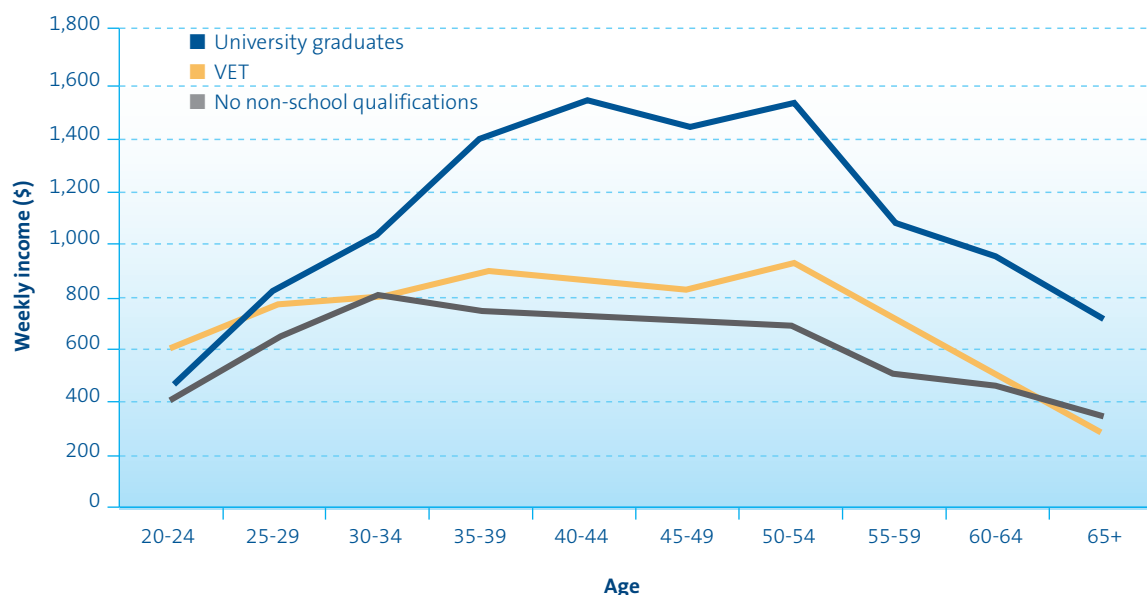
- who they are
- how they meet the costs of living while they study, and
- how their HECS debts get repaid afterwards.

1. Why study? Returns to education

A tertiary education has many benefits. Vocational Education and Training (VET) or university qualifications allow people to specialise in an area of interest and open doors for employment in these areas. People with post-school qualifications generally have more bargaining power in the workforce and are less likely to have trouble finding and keeping jobs. The relationship between higher qualifications and the capacity to earn a higher income is well known, and is shown in Figures 1 and 2. The charts show the average weekly total income from all sources, for men and women by age and highest qualification. Although women's average incomes are lower for all ages and types of qualification (with the exception of women aged 20-24 with university degrees, who briefly out-earn the men by an average of \$105 a week before being overtaken at 25), the incomes of people with higher qualifications of both sexes generally exceed those without at all age groups.

Among men aged 20-24, those with VET qualifications have the highest incomes, most likely reflecting the fact that some in the group may have completed their qualifications earlier and already begun to establish their career. From 25 onwards there is a substantial difference between the incomes of university graduates and their counterparts with VET qualifications, and a further difference between men with VET qualifications and those with no post-school qualifications. For each group, incomes peak in the prime working years of the 30s to early 50s. The average income of male university graduates peaks at age 40-44 at \$1,549 a week. The income of men with certificates or diplomas peaks at the age of 50-54 at \$933 dollars a week. The highest average income of men with no post-school qualifications is of those aged 30-34 at \$811 a week. Thus the average peak income of a male university graduate is around 70 per cent higher than that of a male with VET qualifications and almost double that of a male with no post-school qualifications.

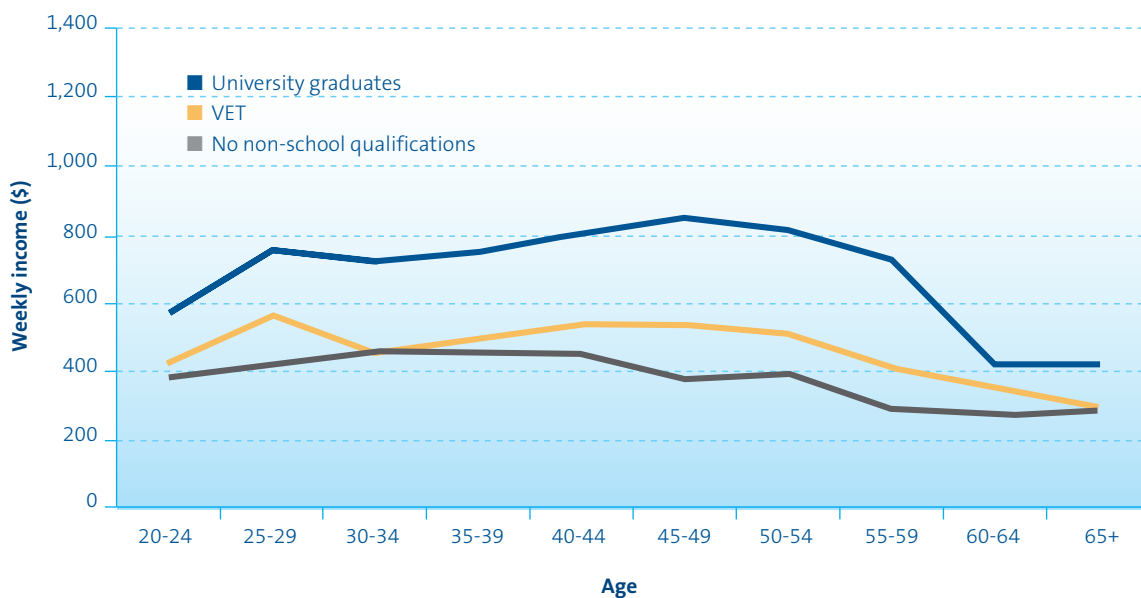
Figure 1 - Men's weekly total income by highest qualification, 2003-2004



Source: ABS Household Expenditure Survey Confidentialised Unit Record File 2003-2004

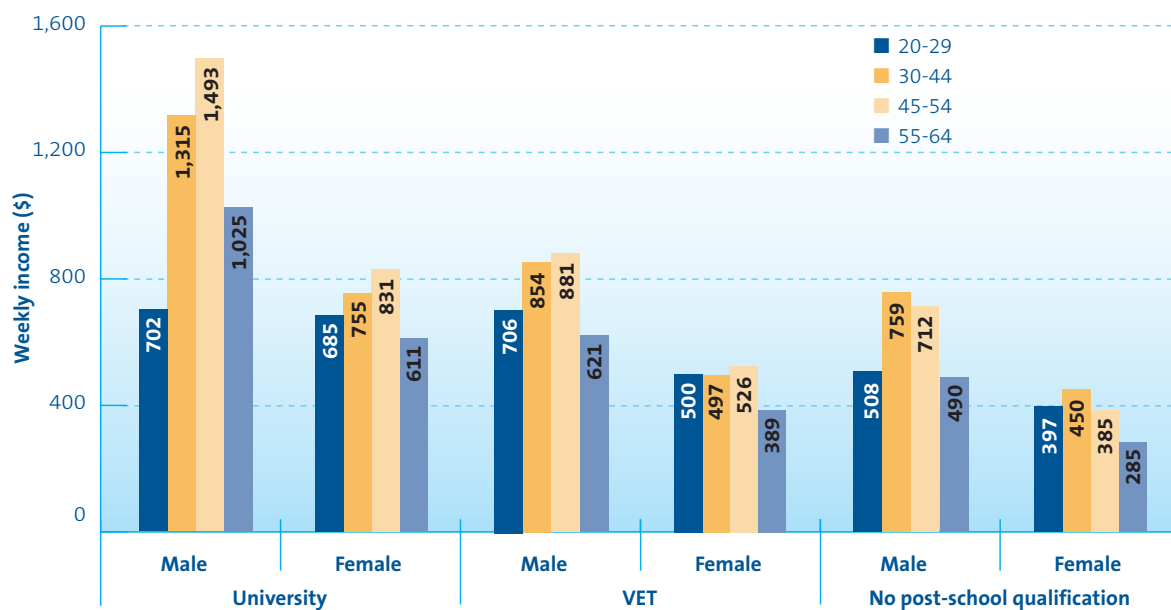
On average, the income of female university graduates peaks at \$842 at the age of 44-49. While this greatly exceeds the average incomes of women with VET or no post-school qualifications, it is only 54 per cent of the peak male graduate income, and closer to that of the male with no qualifications. In comparison, the peak income of women with VET qualifications is \$572 and for women without post-school qualifications \$454 weekly.

Figure 2 - Women's weekly total income by highest qualification, 2003-2004



Source: ABS Household Expenditure Survey Confidentialised Unit Record File 2003-2004

Figure 3 - Average weekly total incomes of men and women, by age and highest qualification, 2003-2004



Source: ABS Household Expenditure Survey Confidentialised Unit Record File 2003-2004

Figure 3 highlights the differences in the average incomes of men and women in the same age group and with the same type of qualification. For each age group and level of qualification men have higher average incomes than their female counterparts.

Across all groups the average incomes of men and women are most similar for 20-29 year olds. It is in what are perhaps the "prime" working years - after the age of 30 - that the gap between male and female earnings begins to widen. A 30-44 year old male university graduate has an average income of \$1,315 that is almost double that of female graduates in the same age group. Similar gender gaps are experienced between men and women with VET and no post-school qualifications.

The years of 30-44 are also when many Australian women are having and raising children. This is likely a factor in this disparity in average incomes, as women in these age groups are more likely not to be in paid employment, or to be working fewer hours than men. After the age of 30, women in each of the qualification and age groups are employed for fewer hours than their male counterparts. For example, on average men aged 30-44 work around 41 hours weekly, compared to an average of around 27 for women in the same age group (HES 2003-04). Even if women rejoin the workforce in later years, or increase their hours of paid employment, their lesser years of experience may contribute to their earnings being less than those of the men.

Over the working lifetime, the generally greater earnings of university graduates add up substantially. Research by Bruce Chapman and Kiatanantha Lounkaew from the Australian National University estimates that the average financial gain from a university degree is over \$1.5 million, when the earnings of university and Year 12 graduates are compared across a lifetime and taking into account the forgone earnings of university students while they study. It is estimated that the lifetime earnings of a university graduate are around 70 per cent greater than those whose highest qualification is Year 12 (Chapman and Lounkaew, in process, 2008¹).

Among its other benefits, a tertiary education clearly improves the financial futures of its successful graduates.

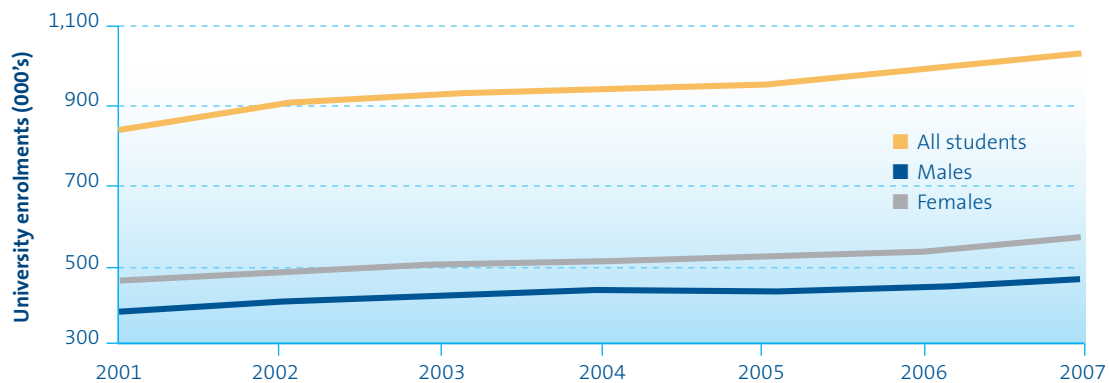
1. Chapman and Lounkaew's estimates are based on data from the Household Income and Labour Dynamics in Australia (HILDA) Survey. Lifetime incomes of university graduates and people without university degrees are estimated using Ordinary Least Squares regression and compared at each age (including while the university students are studying and thus likely to be earning less than their counterparts) in order to estimate the overall financial gain from a university degree.

2. Australia's students

In 2007, there were more than one million people studying at university, and enrolments have increased steadily since 2001, as shown in Figure 4.

Figure 4 also shows that over this period women had consistently made up over half of all students. In 2007, 55 per cent of all university students were female.

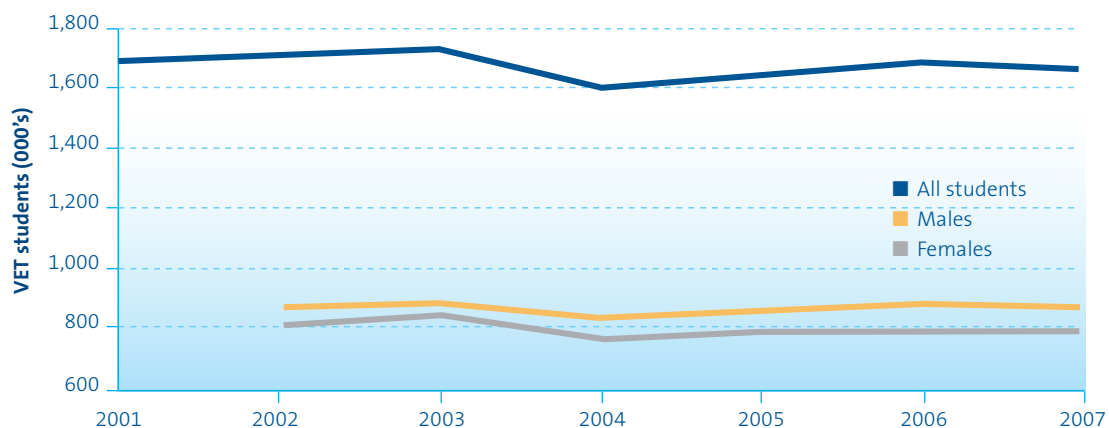
Figure 4 - University enrolments by sex, 2001-2007



Source: Department of Education, Employment and Workplace Relations

In 2007, there were over 1.6 million students in VET. In contrast to university students, men have consistently made up a slightly greater proportion of students in VET. In 2007, just over half of all VET students (52 per cent) were men (NCVER, 2008).

Figure 5 - Students in Vocational Education and Training, 2001-2007



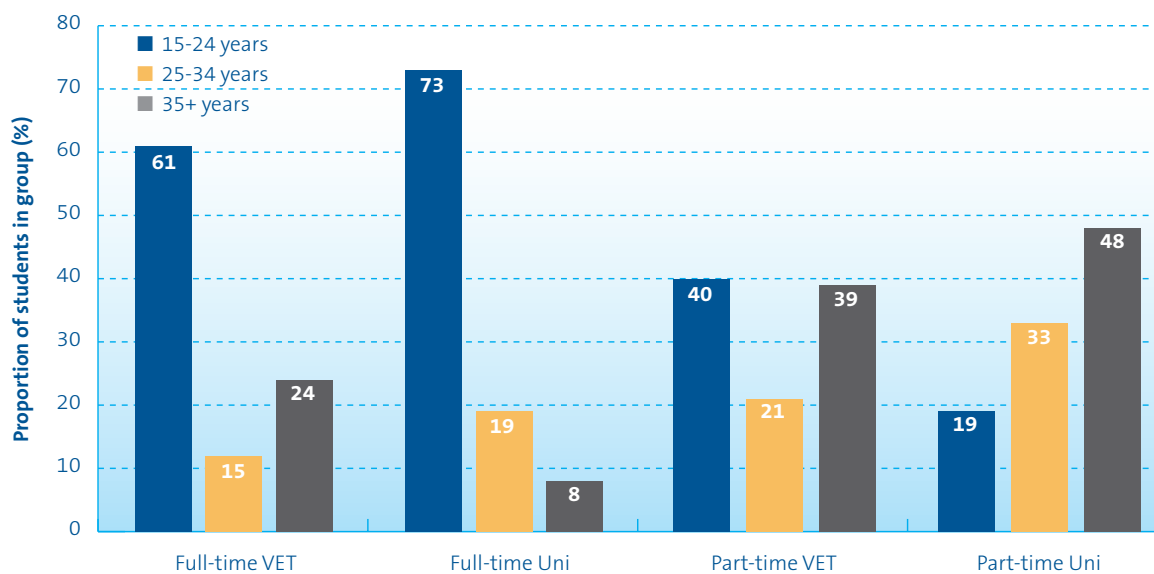
Source: National Centre for Vocational Education Research (NCVER), 2008 and NCVER, 2007

As shown in Figure 6, although the majority of full-time students in both VET and university were under the age of 24, in 2005-06 Australians of all ages were studying. Almost three-quarters (73 per cent) of full-time university students were under 24, 19 per cent were aged between 25 and 34 years and 8 per cent were over 35. In contrast, almost half of part-time university students were aged 35 and over, and 19 per cent were under 24. As people get older and their careers, family lives and

financial commitments are more likely to be more established, part-time study is probably more likely to be an option.

The majority of full-time VET students (61 per cent) are also under 25, although almost a quarter (24 per cent) are over 35. Part-time VET students are relatively evenly distributed across the three age groups with around 40 per cent of students being under 25, 39 per cent over 35, and 21 per cent aged between 25 and 34.

Figure 6 - Students by age group, 2005-2006

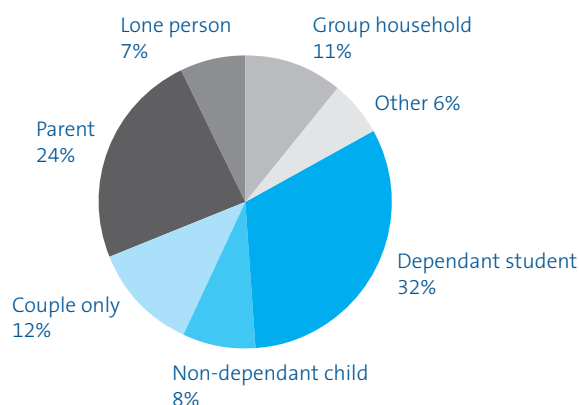


Source: ABS Survey of Income and Housing Confidentialised Unit Record File 2005-2006

Figure 7 shows that almost one-third of all university students are living with their parents as dependants. By definition, these students are studying full-time and are under 25. The further 8 per cent defined as “non-dependant” include those living at home who are either over 25 or are under 25 and studying

part-time. On the flip side, almost a quarter of all university students are combining parenting with study themselves, the majority of which are over 25. Around 11 per cent of university students live in share houses, most likely with at least one piece of furniture made from bricks or milk crates.

Figure 7 - University students by relationship in household*, 2005-2006



Source: ABS Survey of Income and Housing Confidentialised Unit Record File 2005-2006

* As the Survey of Income and Housing does not include people living in non-private dwellings, students living in university residences are not captured here.

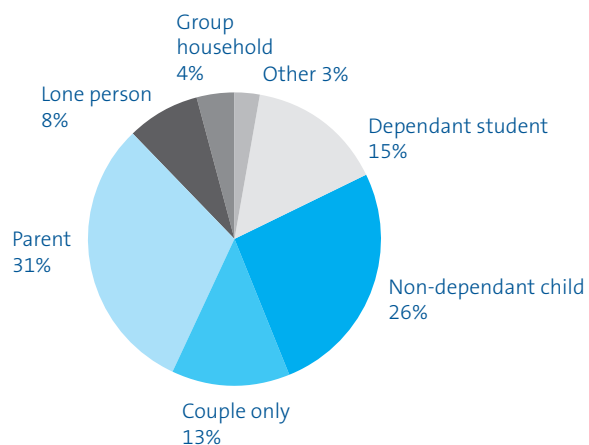


Almost one-third of all university students are living with their parents as dependants.

Overall, less students in VET are defined as being “dependant” on their parents than university students, although around the same proportion are living at home. Over a quarter of VET students are “non-dependant” children. Of these the vast majority are studying part-time and thus cannot be defined

as “dependant”. Almost a third (31 per cent) of all students in VET are parents, and they are less likely than their university counterparts to live in group houses. Similar proportions of university and VET students live with a partner or by themselves.

Figure 8 - Students in VET by relationship in household, 2005-2006

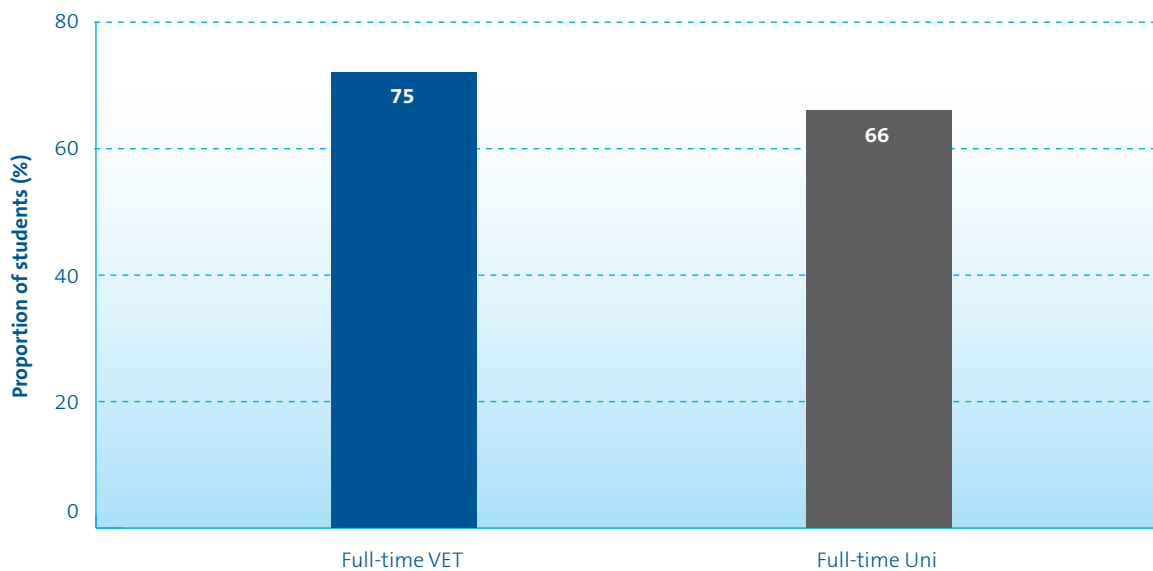


Source: ABS Survey of Income and Housing Confidentialised Unit Record File 2005-2006

Looking just at those students under 25, the majority are living at home with their parents. Three-quarters of full-time VET students and two-thirds of all full-time university students under 25 are dependant on their parents (Figure 9). As explained above, part-time tertiary students cannot be dependant children by the survey definition, but as shown by Figure 10,

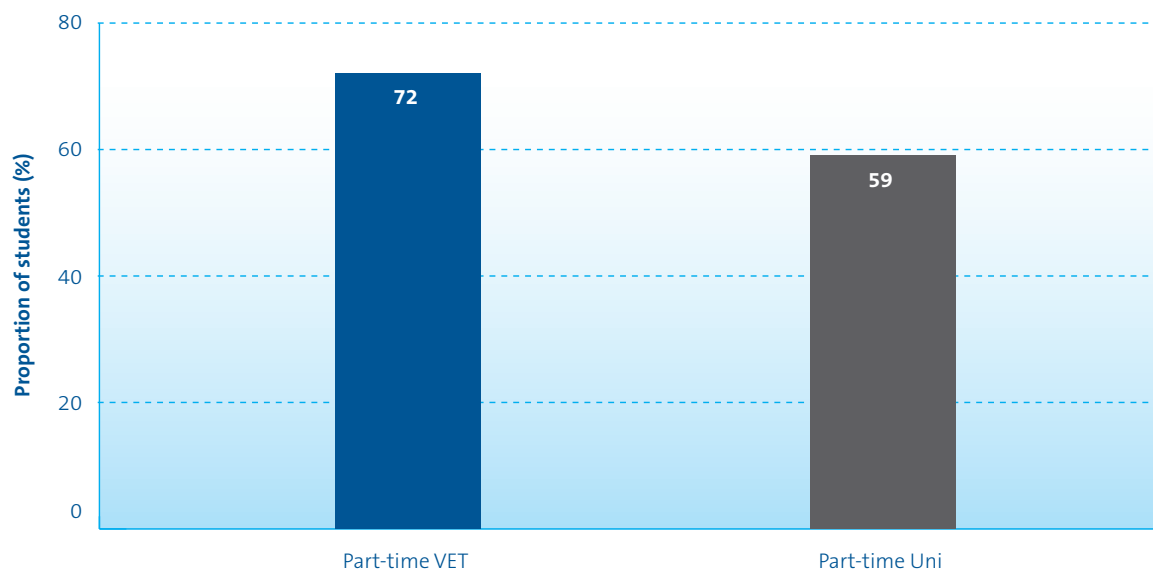
the majority of both part-time VET and university students under 25 are non-dependant children. Not to discount the non-monetary benefits of living with one's parents as a young adult, the substantial costs of living out of home while studying (discussed in Section 3 of this report) could be encouraging many students to stay in the family home.

Figure 9 - Proportion of full-time tertiary students under 25 who are dependant children, 2005-2006



Source: ABS Survey of Income and Housing Confidentialised Unit Record File 2005-2006

Figure 10 - Proportion of part-time tertiary students under 25 who are “non-dependant children”, 2005-2006



3. Learning and earning: students' labour force participation and incomes

A major cost of tertiary education for students is the opportunity cost of foregone earnings in the years while their time is devoted to study. As shown in Section 1, most graduates of tertiary education more than make up for this in their increased earning capacity after they complete their qualification. However, meeting the costs of living while their capacity to earn is limited can be challenging for students. Many students derive their income from more than one source, including:

- Employment
- Government benefits
- Support from their families, and
- Scholarships.

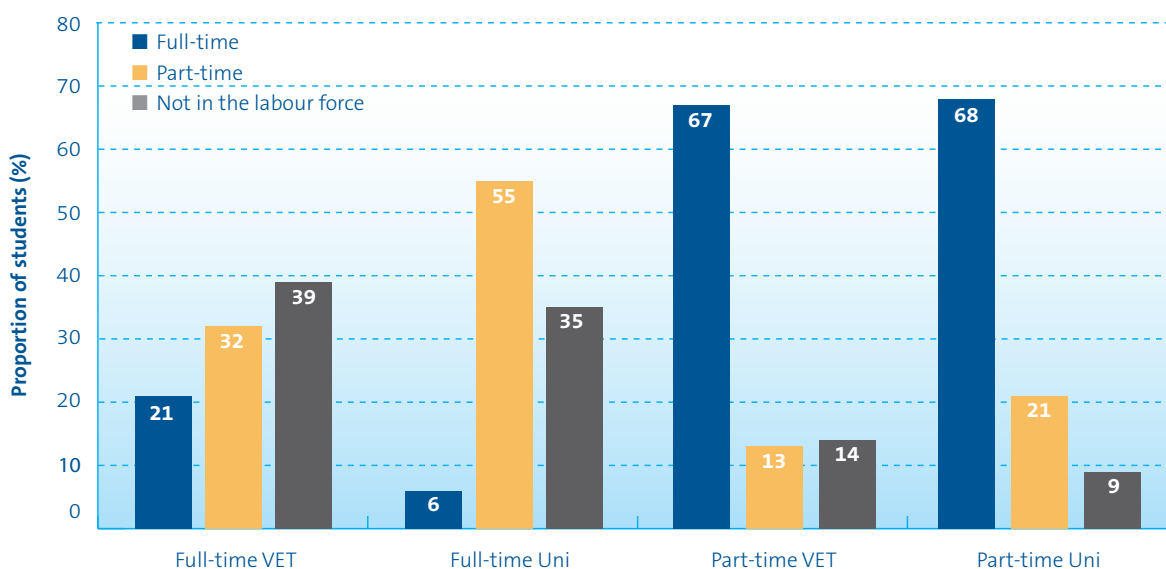
This section looks at how students support themselves while they study.

Most students work while they are studying. As shown in Figure 11, the majority of both full-time VET and university students are employed, including a proportion combining full-time work with full-time study. Just over one-fifth (21 per cent) of full-time VET students also work full-time. It is likely this group includes many apprentices, who combine both on-the-job training and study as part of their qualification, and receive a training level wage. Six per cent of full-time university students also work full-time. Nearly a third of all full-time students in VET and over half of university students are employed part-time.

Full-time work is defined in the SIH as 35 hours a week or more, however the data show that substantial proportions of full-time students employed part-time are working considerable weekly hours. While 23 per cent of full-time students in VET and 40 per cent of full-time university students work between one and 19 hours a week, 9 per cent of VET and 15 per cent of university students work between 20 and 34 hours each week. The vast majority of full-time tertiary students under 25 are employed part-time. Figure 11 shows that although the majority of full-time students are also employed, sizeable proportions are not working. A comparison of household types shows that the majority of full-time tertiary students under 25 who are not working are “dependant students” and thus are generally unlikely to personally face the same level of living costs as those living out of home.

Over two-thirds of both part-time VET and university students work full-time. As shown in Section 2, part-time students are more likely to be older than their full-time counterparts and thus the group likely includes people who want to gain a new qualification while their job remains their main priority and also those who are unable to study full-time due to financial commitments or difficulty meeting the costs of living without a full-time income. Other commitments, such as family, may also lead people to study part-time. Thirteen per cent of part-time VET and just over one-fifth of part-time university students combine part-time work and study. Part-time students are less likely to not be working than those studying full-time.

Figure 11 - Labour force participation of tertiary students, 2005-2006



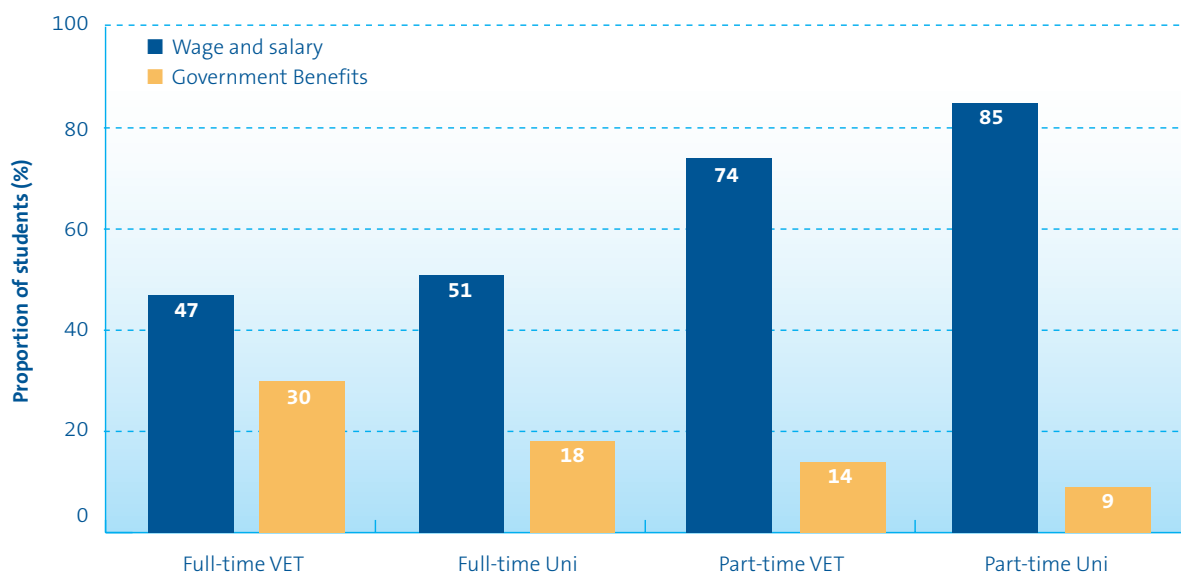
Source: ABS Survey of Income and Housing Confidentialised Unit Record File 2005-2006

In recognition that students have to live as well as study, income support is available to help students with their living costs. The main government support is Youth Allowance, which is available to full-time students under the age of 25 in order to help them meet the costs of living while they study. It was introduced in 1998 to replace a range of other payments, and is also the payment for young people who are unemployed, although some conditions are different. To be eligible to receive Youth Allowance, a student must be studying full-time (including apprentices) and aged 16-24. To gain eligibility, students must also demonstrate that they are independent from their parents, usually by individually earning more than a given threshold. If a student is not deemed independent, a means test of both parental income and assets also applies. The available rate of Youth Allowance differs with the living arrangements of the student and is available to students living in and out of the family home. In September 2008, the fortnightly rate of Youth Allowance for a single student living out of home was \$355.40. Rent Assistance is available in addition to this for students who are paying rent. An income test taper rate also applies to those receiving the payment. Students receive the full amount until their fortnightly earnings exceed \$236 at which point their Youth

Allowance is reduced by 50 cents in the dollar. If their earnings reach \$316 a fortnight, Youth Allowance is then reduced by 60 cents in the dollar of additional income. Students who are over 25 and completing a course they started before they turned 25 are eligible for Youth Allowance. Austudy is a similar payment provided for students commencing study after they turn 25 (Centrelink, 2008).

Figure 12 shows that the majority of students primarily rely on income from earnings, possibly supplementing this with Youth Allowance, rather than the other way around. Around half of both full-time university and VET students have wages and salary as their primary source of income, while 30 per cent of full-time VET and 18 per cent of full-time university students get most of their income from government benefits. As discussed previously, the majority of part-time tertiary students are employed full-time, thus most of them also have earnings as their primary source of income and they are less likely than full-time students to source their income primarily from government benefits. As Youth Allowance is not available to most part-time students, many of those who do have benefits as their primary source of income would be receiving other payments, for example family based payments.

Figure 12 - Proportion of students with earnings or government benefits as their principal source of income, 2005-2006

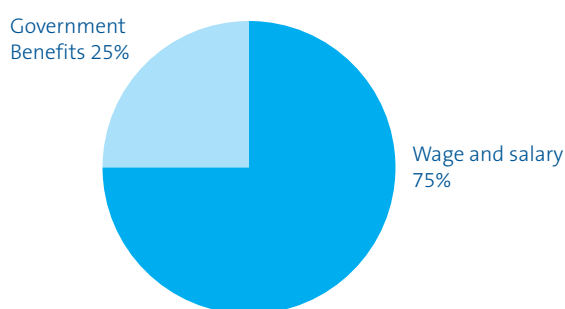


Source: ABS Survey of Income and Housing Confidentialised Unit Record File 2005-2006



The average income of a full-time student under 25 is \$243 a week - this includes around \$156 in weekly earnings and \$36 from government benefits.

Figure 13 - Full-time tertiary students under 25 by principal source of income*, 2005-2006



Source: ABS Survey of Income and Housing Confidentialised Unit Record File 2005-2006

*This excludes a small number of students with other principal sources of income.

Figure 13 shows that of all full-time tertiary students under 25, three-quarters have employee earnings as their primary source of income. The fact that most full-time students rely primarily on their earnings to support themselves perhaps suggests that many students find that they cannot meet their living costs with Youth Allowance or other payments alone. Many are also likely to be ineligible due to their parental incomes or assets, their inability to demonstrate that they are financially independent from their parents, or that their own earnings mean they are not eligible or only eligible for a reduced amount.

So how much income do students have? Table 1 shows the average weekly incomes from earnings, government benefits and total income from all sources for various groups of students. Overall the average total income from all sources for a full-time tertiary student under 25 is \$243 a week. On average this includes around \$156 in weekly earnings and \$36 from government benefits. Although most students source the majority of their income from employee earnings or government benefits, the difference between the average incomes from earnings and benefits received by students suggests at the need for many students to source further income from other sources.

Comparison of the individual incomes of those full-time tertiary students under 25 who are dependant students and those living in group houses demonstrates this. While the

average weekly individual earnings of dependant students are actually slightly higher than of those living in group houses, their total income from all sources is substantially lower. The students in group houses have an average income from all sources of \$326 a week, in comparison to \$192 a week for dependant students. This is partially explained by the additional average income from benefits of the out-of-home students. However, the gap between the average income from the sum of earnings and benefits for students in group houses suggests that the combination is inadequate for students living out-of-home and they need additional sources of income. The average student living in a group house also receives around \$79 weekly from "persons living outside the household", most likely their parents. A recent AMP.NATSEM Income and Wealth Report on Generation Y showed that parents continue to foot the bill after children leave home. In 2003-2004, around 30 per cent of parents gave money to their children living out of home to pay bills or meet debt, 21 per cent for housing costs and around 19 per cent to pay for food, among other items of financial support (Cassells and Harding, 2007).

This is not to say that the costs of studying when the student stays at home are not substantial. Another recent AMP.NATSEM Income and Wealth Report on the costs of children in Australia showed that adult children are in fact the most expensive for parents, with families spending \$384 a week on a child aged 18-24 (Percival *et al*, 2007).

Table 1 - Average weekly incomes of various groups of tertiary students, 2005-2006

	EMPLOYEE EARNINGS (\$)	GOVERNMENT BENEFITS (\$)	TOTAL INCOME FROM ALL SOURCES (\$)
Full-time VET students	183	71	289
Full-time university students	192	45	308
Part-time VET students	498	50	599
Part-time university students	953	41	1,038
All full-time tertiary students under 25	156	36	243
Full-time workers (not studying) under 25	661	4	696
All full-time VET and uni students under 25 by household type:			
Dependant student	161	21	192
Group household	151	40	326

Source: ABS Survey of Income and Housing Confidentialised Unit Record File 2005-2006

In order to gain a sense of the foregone earnings of young students, Table 1 also shows the average income of full-time workers under 25 who are not studying. Their average income, primarily based on their full-time earnings is \$696 a week, more than double the average of full-time students in the same age group.

Notably the employee earnings and total incomes of part-time university students are substantially higher than any other group of students. As shown earlier in Figure 11, 68 per cent of part-time university students are in full-time employment. Also, as shown in Figure 6, a greater proportion of part-time university students than any other group of students are over 35 years of age, suggesting that they are likely to have higher incomes in their employment. This group of older part-time university students likely includes some students who are studying postgraduate or second degrees, and thus already have qualifications that contribute to their earning capacity.

4. Costs Part 1: Living as a student

Many students and former students will identify with the tight budget that can come with full or part-time study - living in crowded group houses on a diet based around cans of baked beans and spaghetti. While full-time students generally do not have the capacity to earn as much as people working full-time, the costs of living they face are generally similar.

Table 2 compares the incomes and expenditure on various necessities of full-time tertiary students (both in university and VET) and full-time employees who are not studying who

are under the age of 25 and living in group houses (where all members are unrelated adults). It has been assumed that rent and expenditure on the other items shown in Table 2 is shared equally between household members, thus the household's total expenditure on each item has been divided by the number of people in each household. Twelve per cent of full-time VET and university students live in group houses, and the majority of group houses are renting.

Table 2 - Comparing the average weekly income and expenditure of full-time tertiary students and full-time employees under 25 living in group houses, 2008¹

	FULL-TIME STUDENTS (\$)	FULL-TIME WORKERS, NOT STUDYING (\$)	DOLLAR DIFFERENCE (\$)	PERCENTAGE DIFFERENCE (%)
Total individual income from all sources	269	822	-533	-206
Individual income from government benefits	52	13	39	75
Individual earnings	121	790	-668	-551
Expenditure per person				
Housing costs	116	104	12	11
Domestic fuel and power	6	10	-4	-65
Food and non-alcoholic beverages	69	70	-2	-3
Household services and operation	21	30	-9	-42
Transport costs	48	88	-40	-84
Personal care	6	11	-5	-81
Miscellaneous	104	41	64	61
Total expenditure²	542	686	-145	-27

Source: ABS Household Expenditure Survey Confidentialised Unit Record File 2003-2004, see Technical Notes for details

1. Values are based on 2003-2004 data and have been up-rated to 2008 dollars. Total income and individual earnings have been up-rated based on the growth of average weekly total earnings for persons between November 2003 and May 2008 (ABS, 2008, 6302.0). All other figures have been up-rated by the growth in CPI between December 2003 and June 2008 (ABS, 2008, 6401.0).
2. **Note:** Total expenditure includes additional items to the others listed including medical care and health, household furnishings, equipment and recreation expenditure. These contribute to the difference between the total expenditure and the sum of the items listed.

As shown in Table 2, the personal income of the students is substantially lower than that of the young full-time workers. While the average total income from all sources for full-time workers under 25 is \$822 a week, the average total income of full-time students is less than a third of this at \$269 weekly. Unlike the workers' income, which is primarily based on their earnings, the students' incomes are more likely to come from a range of sources including earnings, government benefits

and possibly supplemented with other sources, such as income from their parents or scholarships. The average earnings of full-time students (\$121 weekly) are less than one-sixth of those of full-time workers in the same age group (\$790). On average, full-time students living in group houses receive \$52 a week in government benefits, most likely Youth Allowance and Rent Assistance.

In contrast to the differing incomes of young students and workers, their living costs while living in group houses are more similar. In spite of having total income that is on average \$553 a week less than their full-time employee counterparts, the average total weekly individual expenditure of students is \$542 compared to \$686 for workers. The fact that the average total expenditure of the students is greater than their total income suggests that students may be relying on help from their families, using credit cards or drawing on savings in order to meet the weekly costs of living.

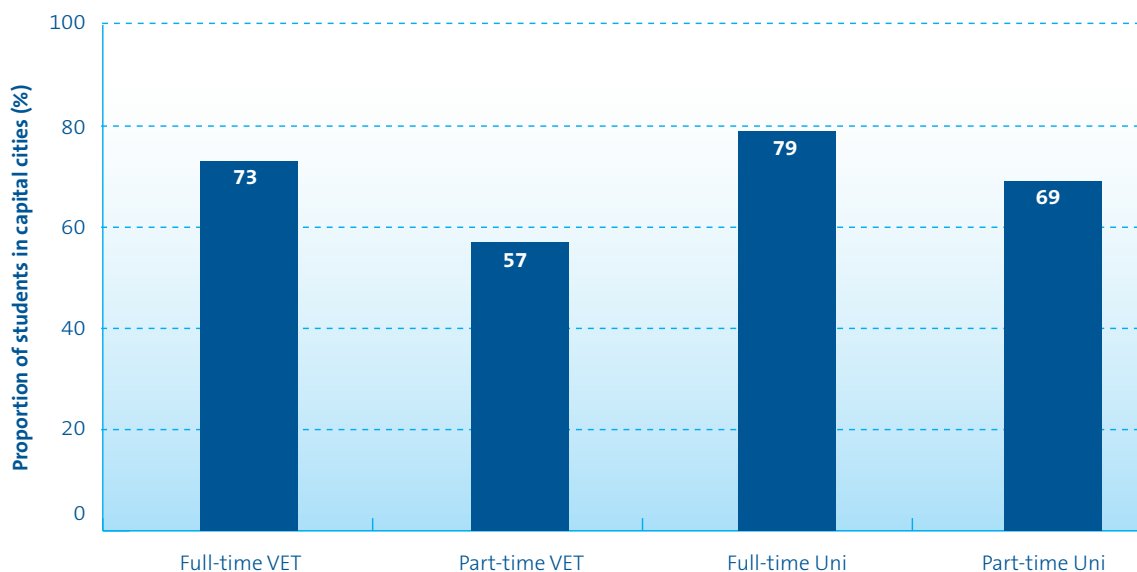
Although the workers are likely to spend more because they have higher incomes, the costs of necessity items, such as housing, groceries and transport, need to be met and are often less discretionary. The young workers and students spend roughly the same amount on food and non-alcoholic beverages each week and the dollar differences in the amounts they spend on domestic fuel and power (utilities), personal care and household operation and services (including other household items such as cleaning products, gardening supplies, mobile and fixed telephone accounts) are minimal.

Students tend to have lower transport costs, spending on average \$40 less a week than their working counterparts. This is likely due to the fact that with the rising price of petrol, students may be less likely to be able to afford their own cars and are saving money by using public transport.

On average, young students in group houses spend \$63 a week more on “miscellaneous goods and services” than the young workers. This is because this expenditure group includes a range of items, many of which apply especially to students. These include fees and charges for tertiary education, and HECS repayments, although most students in this group would not have reached a level of income at which they would be making repayments.

Table 2 shows that on average, students in group houses actually have higher weekly housing costs than the full-time workers. On average, the weekly rent per person in the students’ group houses is \$116, in comparison to \$104 for the workers’ houses. This is likely related to the fact that the vast majority of students live in capital cities, where housing prices have been rapidly rising in recent years and are generally much higher than those in the rural or regional areas. As most universities and vocational training centres are located in capital cities, or regional centres, many students incur the costs of moving to, and living in, these cities in order to pursue their education. Of the subset used in Table 2, 87 per cent of the students live in capital cities compared to 65 per cent of the full-time workers. Further, as shown in Figure 14, the majority of all VET and university students, both full- and part-time, live in capital cities.

Figure 14 - Proportion of students living in capital cities, 2005-2006



Source: ABS Survey of Income and Housing Confidentialised Unit Record File 2005-2006



Youth Allowance has not kept pace with the increases in rent, groceries and transport.

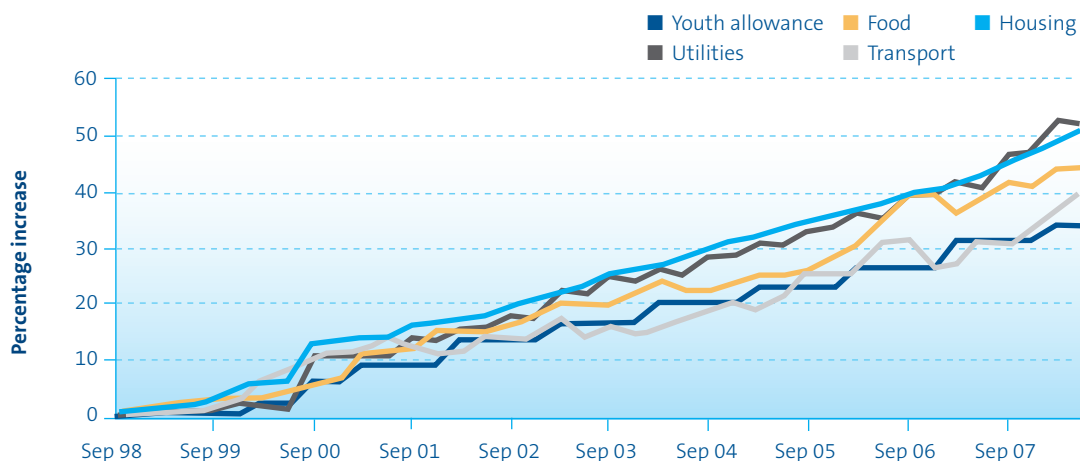
The price of many everyday living essentials has been increasing steadily in recent years, especially in Australia's capital cities. The increased costs of living put particular pressure on those on low incomes, including students, as meeting these costs demands a greater proportion of their income than those on higher incomes. The high costs of housing, groceries and transport, especially in the cities where many universities and VET institutions are, has likely contributed to the majority of young students remaining at home with their parents, or the decision of students to study part-time or take a year off to work and save before pursuing their study.

Figure 15 shows the increase in the Consumer Price Index (CPI), based on the average of prices in Australia's capital cities, for housing, utilities, transport and food since September 1998.

The price of each of the items has increased substantially over the period. The greatest increase was in utilities, the price of which increased by 52 per cent over the period, closely followed by the price of housing which increased by 51 per cent. The cost of food increased by 44 per cent, and transport prices by 40 per cent over the period.

Figure 15 also shows the increase in the fortnightly rate of Youth Allowance since September 1998. Although Youth Allowance is indexed regularly on the basis of the CPI, Figure 15 shows that it has not increased at the same rate as these key living costs. Over the decade from September 1998, Youth Allowance has increased by 34 per cent, meaning that students relying on the payment would be finding it increasingly difficult to meet the costs they face every day.

Figure 15 - Percentage increase in Youth Allowance and CPI for various necessities, 1998-2008

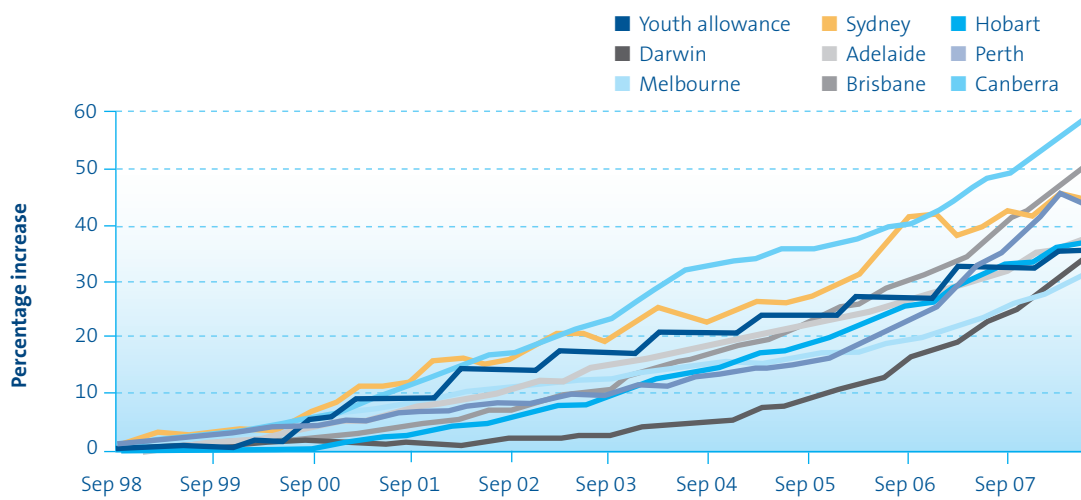


Source: CPI figures from ABS, 2008, Consumer Price Index, Table 7 weighted average of eight capital cities, Catalogue number 6401.0. Youth Allowance Rates from STINMOD

Figure 16 looks specifically at the CPI for rent in each capital city, and shows that with the exception of Melbourne and Darwin, the increase in rent has exceeded the increase of Youth Allowance in the decade from September 1998. The greatest increase in rental prices was in Canberra, where rents increased by 57 per cent over the period. Rents in Brisbane increased by 49 per cent, in Perth by 48 per cent, in Sydney by 43 per cent, in

Adelaide by 37 per cent and in Hobart by 36 per cent. Australia's capital cities are our key centres for tertiary education and many students need to move to these cities to study. Thus their financial ability to pay the increasing rents in these cities is likely to play a crucial role in their decision making and ability to pursue tertiary education.

Figure 16 - Percentage increase in Youth Allowance and CPI for various necessities, 1998-2008



Source: CPI figures from ABS, 2008, Consumer Price Index, Table 13 by capital city, Catalogue number 6401.0. Youth Allowance Rates from STINMOD

Let's examine the budget of a typical student living in a group house with the average earnings and expenditure shown in Table 2. The current full weekly rate of Youth Allowance for a student living out of home is \$177.70 per week. If a student had the average earnings shown in Table 2 of \$121 weekly, they would just exceed the income free area of \$118 so their Youth Allowance would be reduced by \$1.50 to \$176.20. If the student was also paying the average individual rent of \$116 weekly shown in Table 2, they would also be entitled to the full amount of Rent Assistance for someone in a shared house of \$35.75 a week. Thus their income from government

benefits and earnings (the key individual income sources for students) would be \$332.95 a week. After paying rent, that would leave the student \$216.95 a week to meet other costs. If the student had the average expenditures shown in Table 2, the sum of the cost of food, utilities, transport, household operations and services, personal care and miscellaneous goods would exceed this budget by \$37.05. This hypothetical budget demonstrates the difficulty for students to support themselves independently. For this reason, many work longer hours, seek support from parents or, where possible, remain in the family home.

5. Costs Part 2: A HECS upon you

Section 3 examined the costs of tertiary education while students are studying. This section looks at HECS debt, which becomes a cost to students when their incomes reach a certain level, usually after they've completed their study.

HECS-HELP is the current version of the original Higher Education Contribution Scheme, which was introduced in 1989 to help fund the expansion of university places by having students contribute to some of the costs; the rationale being that students would, over the long term, gain the most economic returns from a university education (Beer and Chapman 2004).

HECS-HELP allows eligible students to pay for their student contributions (essentially, their fees) in several ways. These are: by making a full up-front payment, which allows for a 20 per cent discount; by making a partial up-front payment, which also carries a discount; or, by taking out a HECS-HELP loan for the full liability (Commonwealth of Australia, 2008).

A HECS-HELP loan allows students to defer their education payments until their repayment incomes reach a specified threshold. In 2008-09, this threshold is \$41,595 and once reached, the debt must be paid back at a rate of between 4 per cent and 8 per cent, depending on their assessable income level. Table 3 shows the income thresholds and repayment rates applying to HECS-HELP debts.

Table 3 - HELP-HECS repayment thresholds, 2008-2009

INCOME THRESHOLD	REPAYMENT RATE
Below \$41,595	Nil
\$41,595-\$46,333	4%
\$46,334-\$51,070	4.5%
\$51,071-\$53,754	5%
\$53,755-\$57,782	5.5%
\$57,783-\$62,579	6%
\$62,580-\$65,873	6.5%
\$65,874-\$72,492	7%
\$72,493-\$77,247	7.5%
\$77,248 and above	8%

Source: ATO, 2008

In 2005, the FEE-HELP scheme was introduced, through which the government can pay the fees of private institutions to the institution upfront and then students pay off the debt through the same system as HECS-HELP.

Through FEE-HELP, tertiary students outside of public universities, including students at private universities and other higher education institutions such as theology colleges have access to income contingent loans to cover their fees. Some VET students also increasingly have access to such loans through FEE-HELP. FEE-HELP loans have been available in 2008 to some VET students whose study could be credited towards entry to university, and there has been discussion of extending the scheme further.

For students graduating in 2007 the average total fee for their Bachelor pass degree was \$20,579. As shown in Table 4, the average costs of degrees vary with field of study. For each course there are additional fees for completing Bachelor's honours, and HECS can also be applied to postgraduate

courses. The most expensive courses include Engineering and Related Technologies, where the average fee for a Bachelor degree is \$27,608, and Architecture and Building where the average fee is \$25,660. The notoriously expensive Medicine degree falls into the field of "Health" shown in Table 4. As relatively less expensive degrees such as Nursing also fall into the category the average fee for the field is \$21,199 not much more than the overall average fee for Bachelor degrees. Law is also well known to be a costly degree, and falls into the category of Society and Culture in Table 3. Similarly the average fee for this field reflects the range of courses in the category, including courses with relatively lower fees such as Languages, Social Work and Political Science.

For most degrees there are additional fees for completing Bachelor's honours, and HECS can also be applied to postgraduate courses. The average fee for completing honours, usually an additional year of study after a Bachelor degree, is \$5,056.

Table 4 - Average total course fees by field of study and level of course, 2007

	BACHELOR'S PASS (\$)	BACHELOR'S HONOURS (\$)	POSTGRADUATE (\$)
Natural and Physical Sciences	20,883	5,844	7,257
Information Technology	20,761	5,999	8,996
Engineering and Related Technologies	27,608	6,019	7,472
Architecture and Building	25,660	5,394	9,642
Agriculture, Environmental and Related Studies	21,148	5,982	7,237
Health	21,199	5,429	6,671
Education	16,805	4,023	4,356
Management and Commerce	21,558	6,118	8,367
Society and Culture	19,353	4,362	6,364
Creative Arts	16,643	4,286	6,287
Food, Hospitality and Personal Services	18,411	*	*
Overall average	20,579	5,056	5,773

Source: Department of Education, Employment and Workplace Relations (DEEWR), 2008

As shown in Table 5, on average women have lesser course fees than men. The average Bachelor course fee for male students is \$22,018 in comparison to \$19,548 for women. This likely reflects the greater representation of men in some of the more expensive degrees such as Engineering and greater representation of women in some of the less expensive degrees including Education and Nursing.

Table 5 - Average fees for Bachelor Pass degrees for male and female students, 2007

	AVERAGE FEE FOR BACHELOR DEGREE (\$)
Males	22,018
Females	19,548
Overall average	20,579

Source: Department of Education, Employment and Workplace Relations (DEEWR), 2008

As fees differ between universities and courses, the average debt incurred by students varies across the states. Students in Victoria have the highest average overall fees of \$21,210, while those in Multi-State universities (with campuses in more than one state) have the lowest of \$16,392.

Table 6 - Average course fees for Bachelor pass degrees for students in each state, 2007

	Average fee for Bachelor degree (\$)
Multi-State Universities	16,392
Northern Territory	17,062
Tasmania	17,077
Australian Capital Territory	19,913
South Australia	20,318
New South Wales	20,389
Queensland	20,845
Western Australia	21,133
Victoria	21,210
National average	20,579

Source: Department of Education, Employment and Workplace Relations (DEEWR), 2008

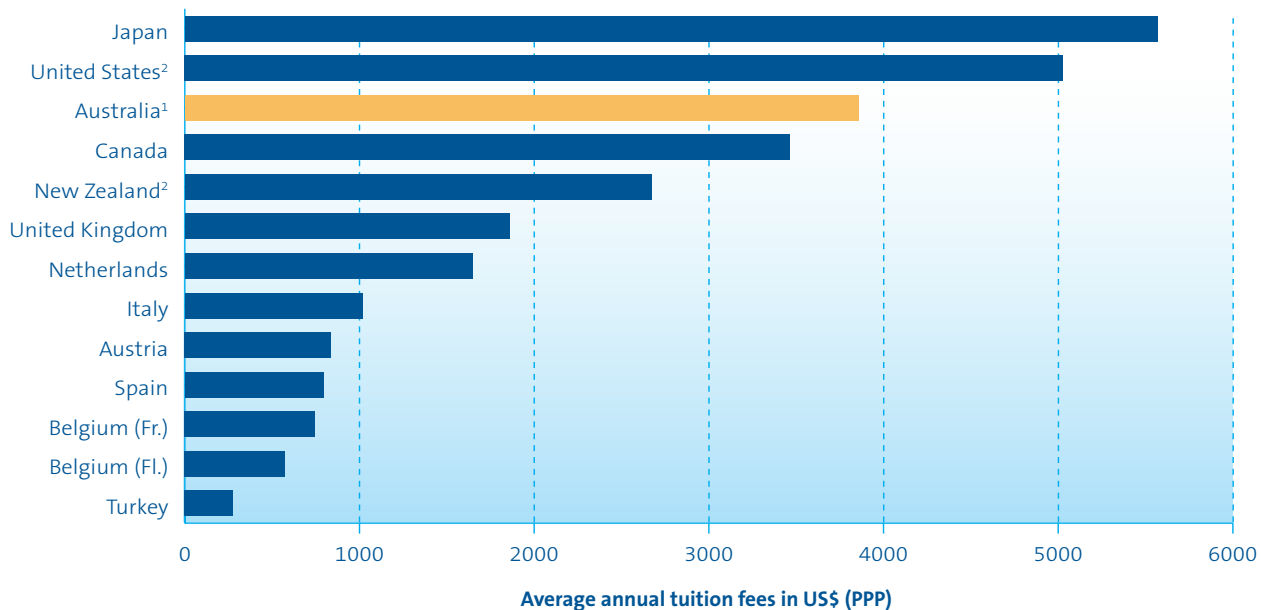
So how do Australian university fees compare with other countries? The international comparison of university fees is somewhat complicated by the difference in systems across countries, and the different ways in which governments offer support to students. In some European countries, including Denmark, Finland, Ireland, Norway, Poland and Sweden, students pay no tuition fees and the majority of funding for tertiary education is public (OECD, 2008). In other countries including the US and Korea the majority of university funding is private, and this leads to relatively high fees (Chapman and Tulip, 2009). Countries use different methods of supporting students, including scholarships or loans schemes such as Australia's HECS. Several countries offer income contingent loan schemes similar to Australia's including New Zealand, South Africa and the UK, although each is slightly different. Notably in New Zealand loans cover some living costs in addition to course fees (Chapman and Tulip, 2009).

In Australia, HECS allows students to pay their fees only if and when their incomes reach a certain level. However in comparison to other OECD countries, the fees are relatively high. Figure 17 compares the average annual fees for university education across selected OECD countries where tuition fees apply and data was available in 2005, expressed in US dollars as Purchasing Power Parity (PPP)¹. The average annual fee of \$3,855 means Australia has the third highest fees, after the US and Japan.



¹ Purchasing Power Parities are exchange rates used to compare different currencies, in terms of what can actually be purchased with the money. For further information about PPP as used by the OECD see OECD, 2008, Annex 2.

Figure 17 - Average annual tertiary education* fees per student in selected OECD countries, 2005



Source: OECD, *Education at a glance 2008*, Table B5.1c

*This data is based on fees for what the OECD defines as "Type A Tertiary" courses. This definition could be roughly described as university bachelor and courses and some postgraduate courses, while Type B refers to VET type courses and shorter university courses. However there is some overlap. For more information see OECD, 2008 Annex 3.

Purchasing Power Parities are exchange rates used to compare different currencies, in terms of what can actually be purchased with the money. For further information about PPP as used by the OECD see OECD, 2008, Annex 2.

Data for Belgium is divided into Flemish and French institutions.

1. Excludes international (full-fee paying students).
2. Distribution of students in total tertiary education.

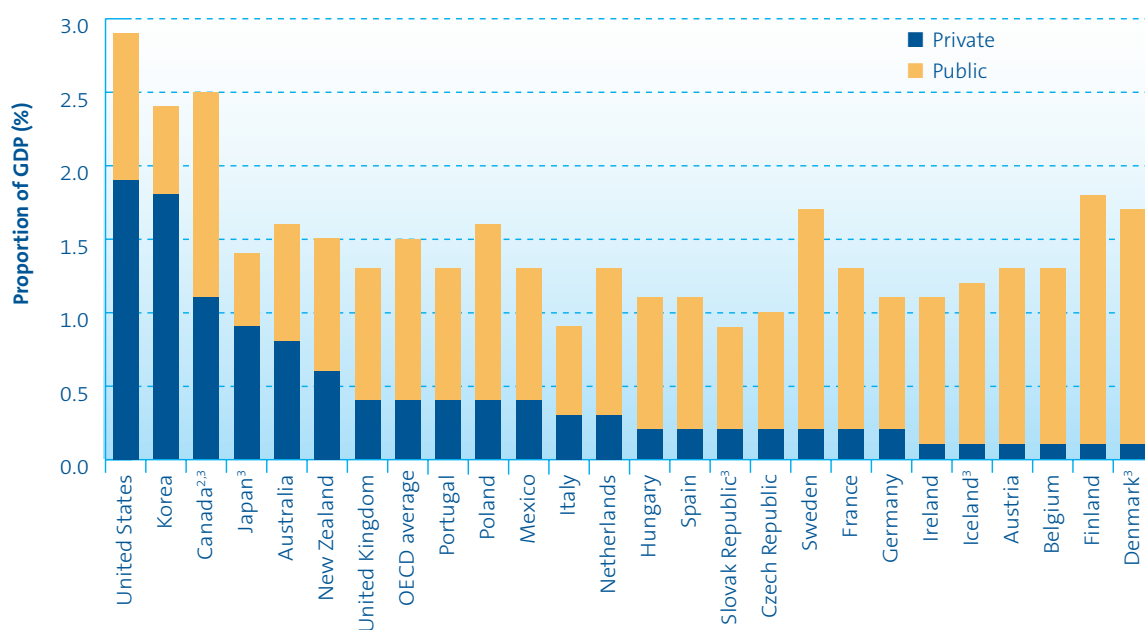
Figure 18 compares public, private, and total expenditure on tertiary education as a proportion on Gross Domestic Product (GDP)² in OECD countries. Compared to many OECD countries, the proportion of private funding for education in Australia is relatively high, exceeded only by the US, Korea, Canada and Japan. In Australia in 2005, 1.6 per cent of GDP was spent on

tertiary education, and this was shared evenly between public and private sources (0.8 per cent each). The fact that Australian students cover a substantial proportion of the costs of their degrees through the repayment of HECS contributes to this relatively high proportion of private expenditure on tertiary education.



In 2005-2006 almost 6 per cent of Australian households were paying off a HECS debt.

Figure 18 - Public and private expenditure on tertiary education* as a proportion of GDP¹ in OECD countries, 2005



Source: OECD, *Education at a glance 2008*, Table B2.4. Also see Chapman and Tulip, 2009

* These figures refer to all types of tertiary education as defined by the OECD.

1. Gross Domestic Product (GDP) is the total value (in local currency) of the output of all resident producers in a country including distributive trades and transport, less the value of purchasers' intermediate consumption plus import duties. For further information see OECD, 2008, Annex 2.

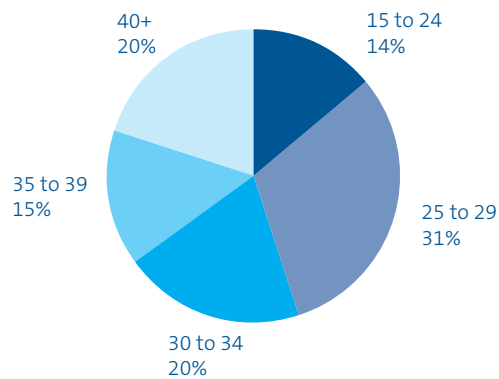
2. Year of reference 2004.

3. Some levels of education included together in accordance with availability of data. See OECD, 2008, Annex 3 for further detail.

In 2005-2006, around 5.6 per cent of Australian households are paying off a HECS debt. This section looks at some of the characteristics of these households. In order to focus on households where the debt belongs to the household reference person or their partner (or both), and where they have completed their study, households which include any current university students or households with non-dependant children have been removed from this sample. Thus there are more households in Australia with HECS debt not captured here, as the section focuses only on those who are likely to be paying them off and where information about the household reference person is likely to reflect the person with the debt, rather than their parents. As shown in Issue 17 of the AMP.NATSEM Income and Wealth Report, many young adults are staying longer in the family home even after they would have completed their study (Cassells and Harding, 2007).

As shown in Figure 19, in almost one-third (31 per cent) of households with HECS debt in this group, the household reference person is aged 25-29. A further 14 per cent of households with HECS debts are headed by someone under the age of 25. Fifteen per cent of households with HECS debt are headed by someone aged 35-39 and 20 per cent by some over 40. As people can study and incur a HECS debt at any age, this does not necessarily mean that people in the older age groups are taking many years to pay off their debt. However, the chart does show that the majority of households with HECS debts are most likely to be headed by younger people, who are likely to have completed their study in recent years.

Figure 19 - Households with HECS debts by age of household reference person, 2005-06

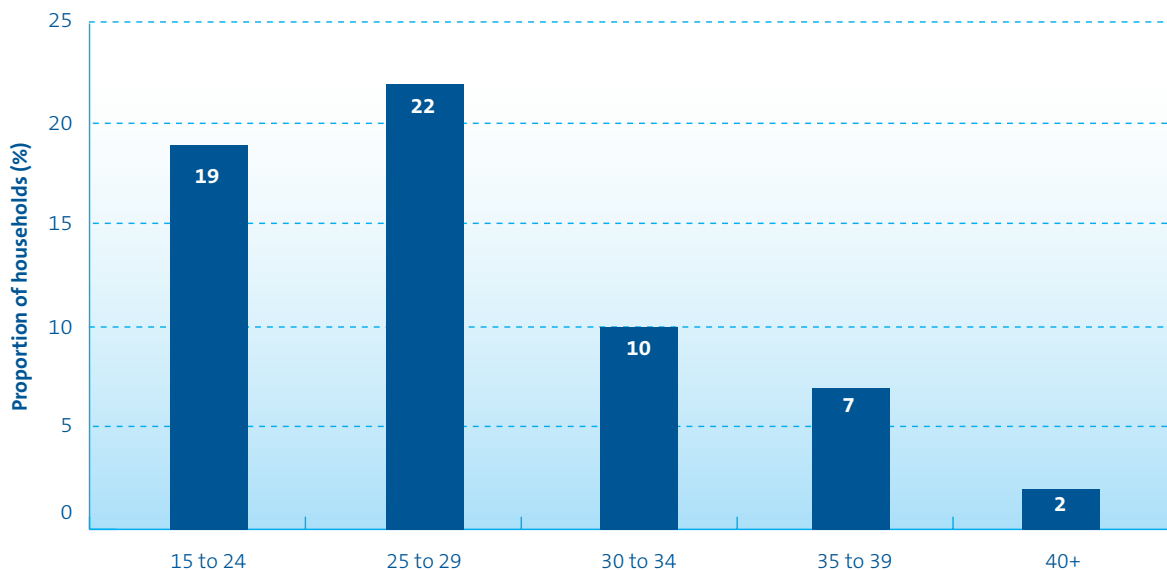


Source: ABS Survey of Income and Housing Confidentialised Unit Record File 2005-2006

Figure 20 shows the proportion of households with reference people in each age group with HECS debt, and shows that younger households are more likely to have a HECS debt. While just over one-fifth (22 per cent) of households where the reference person is aged 25-29 have a HECS debt, the proportion decreases as the age of the household reference person increases with only 2 per cent of households where the

head is aged over 40 having a HECS debt. Nineteen per cent of households where the reference person is under 25 have a HECS debt. The slightly lower rate among this group than the 25-29-year-olds likely reflects the fact that by the age of 24, many would not yet have completed their degree, and thus are not included in the subset for analysis.

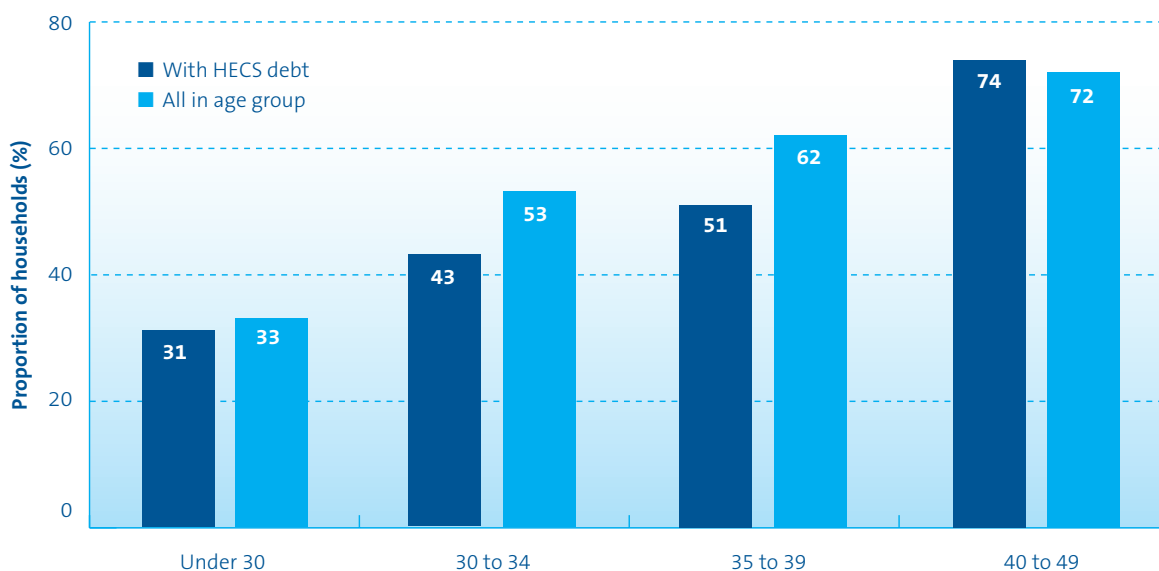
Figure 20 - Proportion of households with HECS debts by age of household reference person, 2005-2006



Source: ABS Survey of Income and Housing Confidentialised Unit Record File 2005-2006

There is currently much concern in Australia about the ability of young people to buy a home. The AMP.NATSEM *Generation why?* Report showed that the proportion of people aged 16-29 who owned their home (with or without a mortgage) had decreased by around 10 percentage points between 1989 and 2003-2004. The report also showed that 67 per cent of people aged 16-29 were “worried” about their ability to purchase a residential property at the age they thought they would (Cassells and Harding, 2007). A key question in relation to this is whether paying off a HECS debt is a factor impeding this ability.

Figure 21 - Rate of home ownership/purchase by age of household reference person and HECS debt status, 2005-2006



Source: ABS ABS Survey of Income and Housing Confidentialised Unit Record File 2005-2006

Figure 21 compares the proportion of households with HECS debts that own, or are purchasing, their homes with the overall proportion of households that are purchasing or own their homes in the household reference person’s age group. While the chart suggests that having a HECS debt may impact on graduates’ ability to buy their home, a potential caveat around the chart is that graduates who may have had and already paid off their HECS debt - likely, because they have high incomes - contribute to the higher rates of ownership among the overall age group. High earning graduates pay off their debts faster, and are also more likely to be buying their homes, thus it is difficult to separate the complex factors that impact simultaneously on home ownership and the repayment of HECS.

For households where the head is under 30, it appears that having a HECS debt makes only a slight difference to the rate of home ownership/purchasing. For households in their 30s there is more of a gap in home ownership between those with HECS debts and the overall group, with those with HECS debts less likely to own or be buying their homes. By the 40s however, those with HECS debts are slightly more likely to own or be buying their homes than the overall average. Although it appears that having a HECS debt could possibly restrict graduates from buying their homes before they are 40, the story behind Figure 21 is perhaps more complicated.

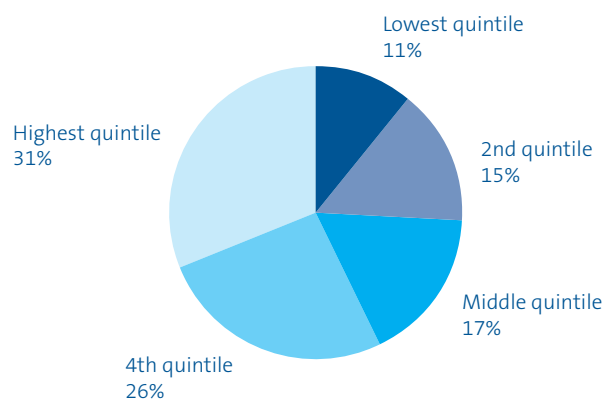
HECS repayments take a slice out of each pay a graduate receives (see Figure 24) and this does impact on their ability to save or make mortgage repayments. However it is unclear whether this alone would influence graduates’ decision to enter the housing market. The repayment of a HECS debt is impacted by graduates’ incomes and whether they have taken time out of the workforce or limited their hours, perhaps to have children. These factors also affect the decision to begin buying a home. For each of the age groups, the overall group likely contains some graduates who have already paid off their debts in full. This would reflect that they have higher incomes that contributed to them paying off their debts more quickly, and also to buying their home earlier. The overall group also is likely to include people with VET qualifications who may have been in the workforce longer than their university counterparts and had a head start in earnings and entering the housing market. Nevertheless, by the 40s having a remaining HECS debt does not appear to have an impact on rates of home ownership, also reflecting the fact that university graduates have higher average earnings as shown in Section 1.

As will be discussed further, even after HECS repayments are made, the average weekly income of graduates generally remains higher than that of their counterparts without degrees.

Figure 22 shows households with HECS debts by income quintile, and shows that households with HECS debts are most likely to have higher incomes. Almost one-third (31 per cent) of households with HECS debts are in the highest quintile of incomes and a further 26 per cent in the second highest quintile of household income. Further to this point, Figure 23 shows the proportion of households in each quintile of income

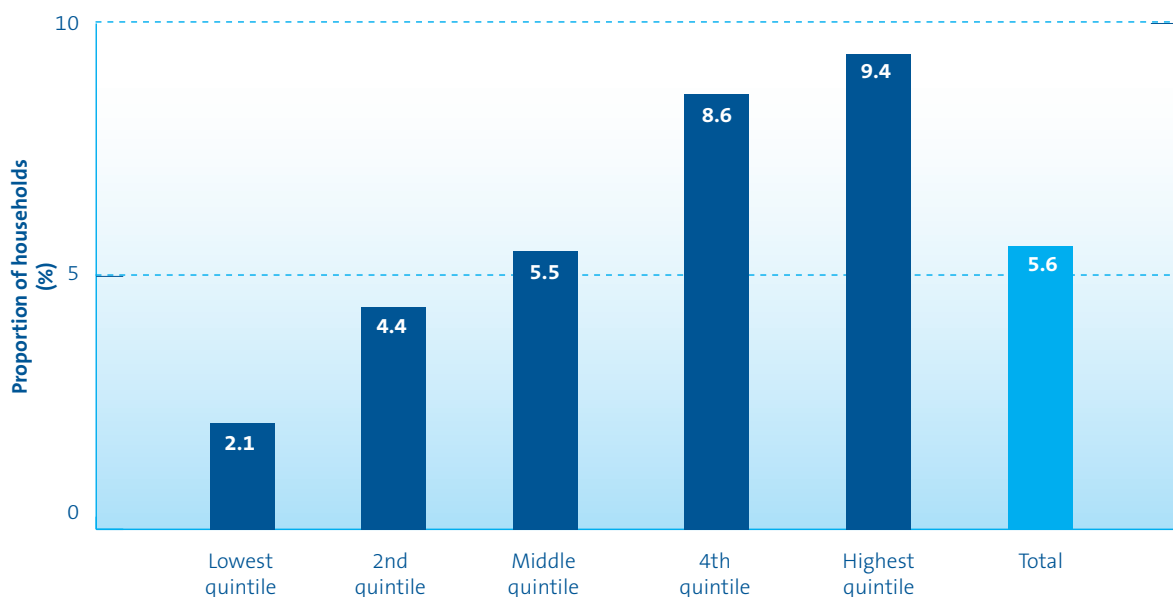
that have HECS debts, demonstrating that the likelihood of having a HECS debt clearly increases with household income. Over 9 per cent of households in the highest quintile of income have HECS debts in comparison to around 2 per cent of households in the lowest quintile of income. This again reflects the higher average incomes of university graduates in Section 1.

Figure 22 - Households with HECS debts by quintile of equivalised disposable income, 2005-2006



Source: ABS Survey of Income and Housing Confidentialised Unit Record File 2005-2006

Figure 23 - Proportion of households in each income quintile with HECS debts, 2005-2006



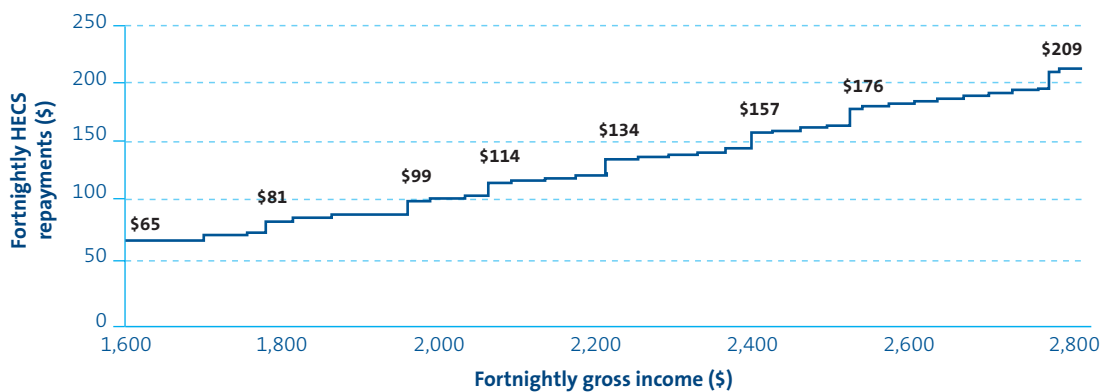
Source: ABS Survey of Income and Housing Confidentialised Unit Record File 2005-2006

* Income quintiles used in figures 22 and 23 are based on equivalised household disposable income. See Technical Notes for more detail.



On average it takes 7 to 8 years to pay off a HECS debt.

Figure 24 - Fortnightly HECS-HELP repayments by fortnightly gross income, 2008-2009



Source: NATSEM estimates, based on ATO, 2008

As shown in Table 3, the threshold of taxable income at which people with HECS debts begin to make repayments is currently \$41,595 annually, or roughly a gross income of \$1,600 a fortnight. At this level of income the fortnightly repayment is approximately \$64. As shown in Figure 24, repayments gradually increase as graduates' incomes increase. The maximum repayment rate for HECS is 8 per cent of taxable income, which applies to incomes above \$77,248 annually, or around \$2,971 gross per fortnight. The maximum payment made by graduates with incomes in the second highest bracket is approximately \$223 a fortnight.

However, it is likely that the weekly incomes of many graduates would remain higher than those of people in their age group without degrees, even after the deduction of HECS repayments. For example, based on the average incomes in 2003-2004 as shown in Section 1, a male graduate aged 30-34 with the average income of \$1,041 would have made an estimated weekly HECS repayment of \$62.

After this deduction, his remaining gross income would have been \$978, greater than the average incomes of men in the same age group with VET or no qualifications of around \$810 weekly in 2003-2004.

But how long does it take a new graduate to pay off this debt? To look at this we selected several representative graduates and estimated their likely repayment profiles. Our hypothetical graduates were, with one exception, assumed to have successfully completed university by age 22; with the level of HECS-HELP debt determined by the type of university course they had taken. None were assumed to have paid off any of their debt before graduating. Their post-university earnings levels then were determined by their subsequent life experience profiles, particularly, whether married and having children, and by their assumed earnings level, which placed each graduate in one of a gender specific low, average or high earnings category.

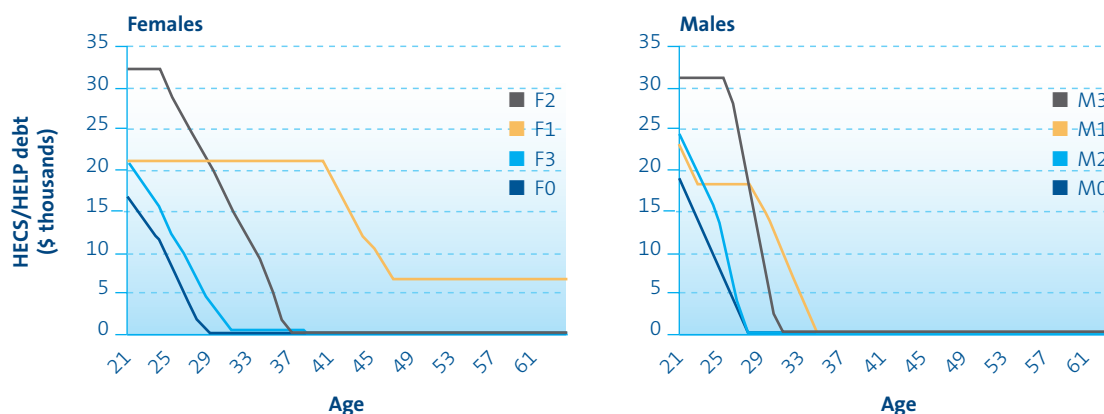
Details of our graduates and their life paths are set out in Table 7. Four male and four female graduates were selected, two were single, two were sole parents (each with two children) and four were married with either two children (two males and one female) or three children (one female). How their HECS-HELP debts are paid down once graduating is shown in Figure 25.

Table 7 - Key assumptions of representative graduates

	GENDER	FAMILY TYPE	CHILDREN	STUDY AREA	HECS DEBT (\$)	EARNINGS LEVEL	YEARS TO REPAY
M0	Male	Single	None	Education	16,805	Average	7
M1	Male	Sole parent	2 children	IT	20,761	Average	14
M2	Male	Married	2 children	Commerce	21,558	Average	7
M3	Male	Married	2 children	Engineering	27,608	High	9
F0	Female	Single	None	Education	16,805	Average	8
F1	Female	Sole parent	2 children	Health	21,199	Low	Not paid off
F2	Female	Married	2 children	Architecture*	31,054	High	16
F3	Female	Married	3 children	Science	20,883	Average	18

*With Honours

Figure 25 - Repayment of HECS-HELP debts, by age and gender



Source: NATSEM estimates

Clearly, and particularly for sole parents and mothers in a couple, having children has a significant impact on the length of time graduates take to repay their HECS-HELP debt. This is not surprising as the number of children and their ages was found to strongly influence the average hours worked by the children's primary carer.

Being a sole parent means, on average, not being able to work as many hours while their children are young, and this impacts on the repayment of income contingent HECS debts. The female sole parent analysed (F1) never pays off her HECS debt, while the male sole parent takes 14 years. While both have

HECS debts similar to the average, the difference probably arises from the fact that the female's income is low and the male's average. A positive aspect of HECS is that as loan repayments are income contingent, repayments are not made if a graduate is not working, or not earning an income above the threshold. The downside of this is that graduates' debts may take many years to pay off. Although no interest applies to the loan, amounts are indexed for inflation each year. However there is no penalty for not paying off the debt, and it is not transferred to others.



Having children at an earlier age could see the time to pay off a HECS debt blow out to 18 to 22 years.

Within couples with children, it is the mother who usually reduces her hours the most, or takes time out of the workforce. Our analysis actually suggests that men in couples with children actually work more hours (perhaps to keep up with the costs of children!). Thus the fathers analysed pay off their debts in similar amounts of time to the single men. The mothers, however, who are more likely to take time out from their careers to raise children or work part-time, take longer to pay off their debts. Our married mother with two children and a high debt (F2) takes 16 years to pay it off, and the married mother with three children and an average debt (F3) takes 18 years to pay it off in full. It is likely that the more children a woman has, the less hours she will work, and thus the longer it will take her to finalise her HECS debt.

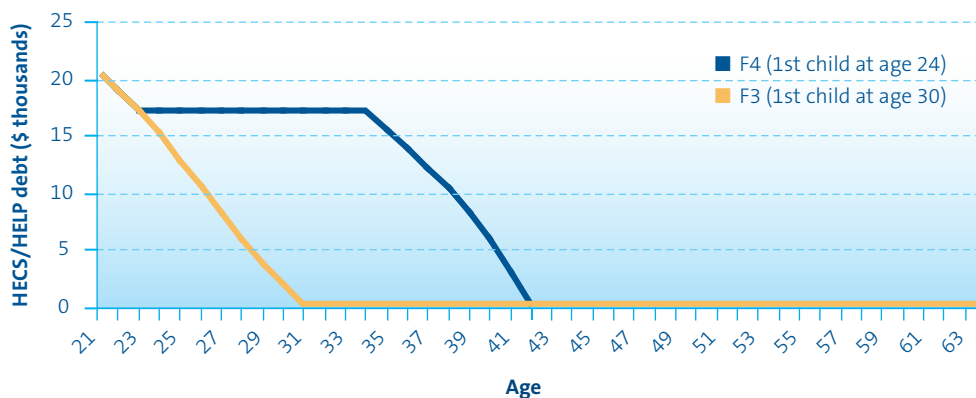
It was also found that, for women, the age at which they first have children is likely to affect how HECS-HELP debts are repaid. This is shown in Figure 26, which compares the paying off of the debts of two female graduates whose circumstances

are identical to our female parent of three children in Table 7, except one has her first child at age 24 (F4) and the other at age 30 (F3). Having children at an earlier age results in the estimates of the average time taken to pay off the debt increasing, from 18 to 22 years.

The single woman in our scenario (F0) takes 8 years with average earnings to pay off a relatively low debt, an amount of time similar to that of the single man without children, or the partnered fathers in the scenario. In all other aspects other than gender, she is the same as the single man in our scenario, with an Education degree, relatively low debt and average level of earnings. However, he takes one year less to pay off his debt. This is likely attributable to the lower average earnings of women discussed in Section 1.

At similar income levels, starting with a larger debt also means that it will take longer to repay the loan, as repayments are set as a share of income, not the debt.

Figure 26 - Repayment of HECS-HELP debts, by timing of children



Conclusions

Tertiary education is undoubtedly worth it, however, many students face substantial costs, both while they study, and after they finish.

HECS-HELP allows students to defer their university fees until their income exceeds a certain level. However, the cost of rent, groceries, bills and transport (and of course text books) while studying cannot be deferred, and it is difficult for students to earn high incomes while they devote their time to study. Most tertiary education institutions are in Australia's capital cities, and thus the living expenses faced by students can be substantial. While Youth Allowance provides a level of income support to full-time students, its indexation has not kept pace with increases in many of the costs of living in our capital cities and most students source their income primarily from earnings. Comparison of young, full-time tertiary students and full-time workers living out-of-home demonstrates that although the incomes of the workers are around three times that of the students on average, their living expenses are similar. Some expenses, including housing, are actually greater for students, reflecting their concentration in capital cities.

The difficulty of balancing study with enough hours of work to provide a sufficient income to cover high rents and other costs is most likely a factor in the high proportion of students remaining at home with their parents while studying. The challenge of reducing one's earning capacity in order to study in the face of these high living costs is perhaps the most substantial financial hurdle for prospective students and their families.

For university students, fees are also a sizeable cost - averaging around \$20,579 for a Bachelor Pass degree. HECS-HELP means that students can defer this debt until their incomes rise above a set threshold. The length of time it takes graduates to pay off their debt is impacted not only by their earnings, but also

whether, and when, they have children. While a man with a high HECS debt but on a commensurately high income can pay off a high HECS debt in eight years after graduating, our hypothetical model shows that a sole mother of two with a low level of earnings may never pay it off in full. A benefit of HECS-HELP is that repayments are reduced, or cease, when a graduate's income falls below certain levels.

HECS repayments do take a slice out of graduates' pay each fortnight, ranging from a minimum of \$64 a fortnight to a maximum of \$223 before graduates enter the top repayment bracket. However, comparison of households with and without HECS debts suggests that having a HECS debt is, in itself, unlikely to influence graduates' ability to own their own home. The majority of households with HECS debts are among those with the highest incomes, reflective of the increased earnings associated with completing a university degree. This is also the group who are the highest home owners or purchasers.

Even after the deduction of HECS repayments it's likely that the incomes of many graduates remain higher than those of their counterparts without degrees, and over the working lifetime the financial gains of university study are generally undeniable. The average HECS debt of \$20,597 is relatively small in comparison to the lifetime earnings gain of around \$1.5 million estimated to come from a university degree (Chapman and Lounkaew, in process, 2008).

While there are undeniable financial returns to education, students and their families face considerable costs, both in paying their way and then paying back their debt. Further education can be of great benefit to all Australians and thus the costs associated with it are an important issue for prospective students and their families and governments who want to see as many Australians as possible have the opportunity to study.

Acknowledgement

The authors would like to acknowledge the expert and valuable advice of Professor Bruce Chapman in preparing this report. Professor Chapman is a Research Associate of NATSEM and Professor of Public Policy at the Crawford School of Economics and Government at the Australian National University.

References

- Australian Bureau of Statistics (ABS 2008), Average Weekly Earnings (original), ABS Catalogue 6302.0, Table 3, August 2008, Canberra.
- Australian Bureau of Statistics (ABS 2008), Consumer Price Index, ABS Catalogue 6401.0, Tables 7 and 13, March 2008.
- Australian Bureau of Statistics (ABS 2007), Survey of Income and Housing- Confidentialised Unit Record File, Canberra.
- Australian Bureau of Statistics (ABS, 2006), Household Expenditure Survey, Confidentialised Unit Record File, Canberra.
- Australian Taxation Office (ATO 2008), Higher Education Loan Programme (HELP) and HECS repayment thresholds and rates, <http://www.ato.gov.au/individuals/content.asp?doc=/content/8356.htm%20>
- Beer, G. and Chapman, B. (2004), "HECS System Changes: Impact on Students", *Agenda*, Volume 11, Number 2, 2004, pp. 157-174.
- Cassells, R. and Harding, A. (2007), "Generation whY?" *AMP.NATSEM Income and Wealth Report Issue 17*, July.
- Centrelink, Youth Allowance, Online Brochure, [http://www.centrelink.gov.au/internet/internet.nsf/filestores/st002_0712a/\\$file/st002_0712en.pdf](http://www.centrelink.gov.au/internet/internet.nsf/filestores/st002_0712a/$file/st002_0712en.pdf)
- Chapman, B. and Tulip, P., (forthcoming, 2009), "Financing Higher Education", in Eva Baker, Penelope Peterson and Barry McGaw (eds), *International Encyclopaedia of Education*, Elsevier.
- Chapman, B. and Lounkaew, K., (in process, 2008, Crawford School of Economics and Government, ANU), "Income Support Issues for Australian Higher Education Students".
- Commonwealth of Australian (2008). Information for Commonwealth Supported Students, 2008, http://www.goingtouni.gov.au/NR/rdonlyres/35A9BDC0-C476-4FC2-9BF6-1A55C510E07B/0/07_068_HECSHELPIINTERNET_004.pdf
- Department of Education, Employment and Workplace Relations (DEEWR 2008), Custom tables provided from Higher Education Statistics Collection.
- National Centre for Vocational Education Research (NCVER, 2008), Australian Vocational Education and Training Statistics: Students and Courses 2007, available at www.ncver.edu.au/statistic/publications/2019.html
- National Centre for Vocational Education Research (NCVER, 2007), Australian Vocational Education and Training Statistics: Students and Courses 2006, available at www.ncver.edu.au/publications/1792.html
- Organisation for Economic Cooperation and Development (OECD, 2008), "Education at a glance", available at http://www.oecd.org/document/9/0,3343,en_2649_39263238_41266761_1_1_1_1,00.html#4
- Percival, R., Payne, A., Harding, A. and Abello, A., (2007), "Honey, I calculated the kids... it's \$537,000: Australian child costs in 2007", *AMP.NATSEM Income and Wealth Report Issue 18*, December.

Technical notes and definitions

Source data

The analysis in this report was based on a variety of data sources. These were unit record data sets from the Australian Bureau of Statistics (ABS): the 2005-06 Survey of Income and Housing (ABS 2007), the 2003-04 Household Expenditure Survey (ABS 2008) and STINMOD, NATSEM's microsimulation model of the Australian taxation and transfer system. Unless otherwise cited, the data presented in tables and charts in this report were calculated by the authors from these data sets.

This report also includes customised tables provided by the Department of Education, Employment and Workplace Relations (DEEWR). Figure 4 shows the total number of university students enrolled throughout all of each year shown as recorded by DEEWR. Section 5 of the report uses data on average HECS-HELP debts sourced from DEEWR. These averages represent the total amount each student is charged for their course (i.e. including any part of the fee that is payed up front as well as deferred) divided by the number of students completing the course in 2007. University fees are charged on the basis of each unit of study, therefore students can be charged for units of study even if they do not complete the entire degree. Thus these averages include the total fees of students who have only completed partial degrees and have dropped out in 2007.

Student expenditure

Table 2 compares the income and expenditure of full-time students in VET or at university who are under 25 and live in group houses with those of people who are employed full-time and are not studying who live in group houses, based on the ABS Household Expenditure survey 2003-2004. Expenditure information is only available at a household level.

The expenditure information in the table refers to the households in which the students and workers live. Thus it is possible that some of the under 25-year-olds actually live in the same group houses together. Group houses are defined by the ABS as households where all members are unrelated adults. In Table 2 it has been assumed that generally in group houses many expenditures, such as rent and groceries, are shared, so the household expenditure on each item has been divided by the number of people in the household. Person weights have been used to calculate the average values, so that the averages represent the average across the individuals, not the households, i.e. the average expenditure of all students under 25 living in group households. Amounts have been up-rated to 2008 dollars.

Households with HECS debts

Figures 19 to 23 show the characteristics of households with HECS debt, based on the ABS Survey of Income and Housing 2005-2006. The section focuses just on households where the HECS debt is likely to belong to the reference person or spouse, in order to better capture the characteristics of the people who the debt belongs to, i.e. many young people living with their parents are likely to have HECS debts, but the characteristics of the household as characterised by the reference person in such a household would not reflect the person with the debt, for example, the age of the household reference person would reflect the parents, not their child, who is paying off the debt, as would the income level of the household. In this section we also wanted to capture people who were likely to have finished accumulating their debt and be paying it off, thus we have removed any households with current students.

Income quintiles

Figures 22 and 23 show households based by income quintile. The quintiles are based on the households' equivalised disposable income. Disposable (after tax) incomes are equivalised so that incomes can be compared across different types of households. For example, a single person and a couple with dependant children with the same income are likely to have different standards of living. Thus an equivalence scale gives "points" to each person in the household and the disposable income is then divided by the sum of these points. This analysis uses the modified OECD equivalence scale, a widely used measure, which gives 1 point to the first adult, 0.5 to each additional person over 15, and 0.3 to each child under 15. After incomes are equivalised, all people are ordered by their household income and then divided into fifths, attributing each household its quintile.

Calculating HECS-HELP repayments

The tables on the repayment of HECS-HELP debts was derived from a purpose built NATSEM's model. Information from STINMOD*, NATSEM's static microsimulation model was used to develop a regression equation that estimated taxable income, according to a person's age, gender, family type, whether they work in a low, average or high income occupation/industry group, and the hours they work. "Hours worked" was estimated from a separate equation, according to age, gender, family type, and the number and ages of their children.

As the graduate progresses through their working lifetime, the cost of repaying their HECS-HELP debt is calculated each year, using the 2008-2009 rates and thresholds (see table 3), after re-estimating what their taxable income would have been, given their current family and work circumstances. At each age this estimate is the average income of people of this age, and with similar gender, family and earning characteristics.

With one exception, the hypothetical graduates were assumed to finish university at age 21 and start their working lives at age 22. The exception was graduate F2, who was assumed to complete an honours course in architecture, which meant she finished university at age 24 and started work at age 25.

All the graduates were assumed to be single when starting work. Those who married, were assumed to do so at age 26 and to have their first child at age 30, with a two-year gap between each subsequent child. Graduates who married, were assumed to stay married and those who were single, to stay single.

*NATSEM's static microsimulation model of income taxes and cash transfers, STINMOD was used as the primary data source for the repayments calculations as it provides the most current estimates of personal incomes. In STINMOD, the rules of Australia's income tax and government cash transfer programs are applied to a database of income units representing the Australian population based on ABS Survey of Income and Housing Costs. The database has records representing each income unit, containing information about the income unit and the persons who make up the income unit. A wide range of demographic, economic and family structure information is available. More details are available from www.natsem.canberra.edu.au.

Consumer Price Index

The Consumer Price Index (CPI) is a quarterly index of the ABS, measuring quarterly changes in the price of goods and services. This report uses the Rent CPI for each capital city and the CPI for various items averaged across the capital cities. For further information see ABS, 2005, Australian Consumer Price Index: Concepts, Sources and Methods, Catalogue number 6461.0 available from www.abs.gov.au.

Dependant children

The ABS defines dependant children as all persons aged under 15 years; and people aged 15-24 years who are full-time students, have a parent in the household and do not have a partner or child of their own in the household. Thus any children over 15 who live with their parents and do not fit this definition are defined as non-dependant children.



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