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The capacity of families to support young Australians: financial transfers from parents, co-residence, and youth outcomes

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## The capacity of families to support young Australians: financial transfers from parents, co-residence, and youth outcomes<sup>\*</sup>

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## 1 Introduction

A young person's future is shaped by his or her investments in education and choice of career path during early adulthood. These critical decisions are influenced by the person's abilities and interests, consideration of expected future standards of living, as well as by the costs of the investments and the financing available. During the years in which young people learn skills that are valued in work places, their earning potential remains relatively low. Without skills, they can earn only a low wage, and if they are studying, there is less time available to work. Naturally, most young people do not have substantial savings and therefore face the question of how to finance living expenses and any direct costs of education during these years. With limited earned income and negligible wealth, many young people rely on support from their parents and from the government. Parental support may come in the form of co-residence or in the form of financial transfers (gifts or loans). Government support takes the form of financial transfers (either gifts, e.g. Youth Allowance, or loans, e.g. HECS).

This report describes whether young Australians from different family backgrounds are economically supported by their parents as well as how this support (or the lack of it) is correlated with their decisions regarding educational and labour market investments. In a previous report (Cobb-Clark and Gørgens, 2008), we found that family background plays an important, and complex, role in young people's use of the public income-support system. The present report broadens that analysis by considering whether economic and social disadvantage reduces parents' capacity to support their young-adult children financially and whether limited parental support has important consequences for young people's human capital investments. As the main measure of economic and social disadvantage we use the parents' history of receipt of income support. The analysis contributes to the literature on identifying young people at risk and can inform policies targeted at assisting young people in need and policies intended to counter intergenerational transmission of disadvantage.

The analysis is based on Youth in Focus (YIF) survey data as well as Centrelink's administrative data about the family's receipt of income support while the young person

was growing up. Survey data were collected from a cohort of young Australians who were 18 years of age in 2006.

The report is organised as follows. Section 2 provides an overview of the relevant background literature, and Section 3 describes the data source. The analysis is divided into two main parts. Section 4 presents an overview of young people's study and work activities, of the support they receive from their parents in the form of co-residence or financial transfers and, finally, of how activities and support vary across people from different family backgrounds. Section 5 presents regression results from the estimation of models of co-residence, financial transfer, study activity and work activity. These outcome variables are regressed on each other and on family background variables. Section 6 provides a summary of results and directions for future research. A short appendix provides further technical information.

## 2 The previous literature

Over the past 20 years or so, parents' support of their adult children, either through joint living arrangements or through financial transfers, has begun to receive explicit attention in the international literature. Generally, researchers have considered support in the form of financial transfers (e.g. Bernheim et al., 1985; Cox, 1987; Cox and Jakubson, 1995; Guiso and Jappelli, 2002) and co-residence (e.g. Wolf and Soldo, 1989; Ermisch and Di Salvo, 1997) separately.

Co-residence can be seen as a form of nonemployment insurance with parents providing their children with a minimum standard of living in the event their labour market outcomes are poor.<sup>1</sup> Intergenerational co-residence helps young people to maintain their living standard in economic downturns (e.g. Card and Lemieux, 1997), cope with job insecurity (e.g. Becker et al., 2005b,a) and smooth consumption in the face of credit constraints (e.g. Fogli, 2004). US parents subsidise education investments allowing their sons to smooth their consumption. Similarly Spanish parents use co-residence as a means of helping their children who are either studying or do not have a job (e.g. Martínez-Granado

<sup>&</sup>lt;sup>1</sup>See Cobb-Clark (2008) for a review of the literature surrounding the co-residence decision.

and Ruiz-Castillo, 2002).

The empirical evidence for Australia is generally consistent with these international patterns. For example, the probability that young Australians live with their parents varies with geographic area, household composition, and demographic characteristics (e.g. Hillman and Marks, 2002; Flatau et al., 2003; Marks, 2005, 2007). Reflecting the lack of data in the past, we know less about the determinants of intergenerational financial transfers in Australia.

Overall it seems clear that young people in Australia are increasingly dependent on their parents for support as they complete their education and enter the labour market. Today young Australians are less likely than previous cohorts to leave home, more likely to be receiving financial support from their parents when they do live apart, and more likely to return home as circumstances change (e.g. Hartley, 1993; Schneider, 1999; Marks, 2007). In part, this is because it now takes substantially longer to acquire work skills than it once did. Changes in social policy since the 1980s have also played a role, as the burden of supporting young adults has been increasingly shifted from the public purse to their families. For example, changes to the unemployment system in the 1980s resulted in those under the age of 21 receiving lower benefits (e.g. Maas, 1990), while the introduction of Youth Allowance has meant that many young people under the age of 25 now qualify for social assistance on the basis of their parents' (rather than their own) incomes.

In addition to the literature on parental support of young-adult children, there is also a large international and Australian literature on the role of various social policies in supporting young adults' human capital investments. A main focus of this literature is the role of financial constraints in young people's educational investments. While the Australian evidence indicates that the existence of deferred, income contingent tuition charges has not deterred poor students from attending university (e.g. Chapman, 2006; Chapman and Ryan, 2005; Cardak and Ryan, 2006), the role of living expenses on participation decisions and the extent to which their effect may be mitigated by government payments has received substantially less scrutiny (exceptions are Dearden and Heath, 1996; Birrell and Dobson, 1998; Birrell et al., 1999; James et al., 2007).

Finally, economists are developing theoretical models of the family's decision-making process surrounding alternative forms of support. In particular, researchers often adopt a noncooperative game theoretic framework when modelling the interaction between parents and their adolescent children (e.g. McElrov, 1985; Weinberg, 2001; Kooreman, 2004; Hao et al., 2008; Lundberg et al., 2007). Unlike the cooperative approach taken in understanding bargaining between spouses, adolescents are better seen as economic agents with independent preferences and the power to influence family outcomes (Lundberg et al., 2007). Co-residence can be seen as a form of interfamilial transfer similar to other inter vivos transfers. Thus, the decision to co-reside rests upon a comparison of the indirect utility when parents live with their adult children and when they do not. Parents are assumed to have either altruistic or paternalistic preferences and the public-good nature of housing implies that co-residence is a less expensive way of transferring resources to children than providing financial transfers directly.<sup>2</sup> At the same time, co-residence may involve additional costs resulting from a lack of privacy and independence (e.g. McElroy, 1985; Ermisch and Di Salvo, 1997; Ermisch, 1999, 2003; Laferrère and Bessière, 2003; Le Blanc and Wolff, 2006; Laferrère, 2006).

## 3 Data: The Youth in Focus Survey

The data used in this research are from the Youth in Focus (YIF) Project.<sup>3</sup> At the centre of YIF is a birth cohort of young people. The YIF data are unique in combining historical administrative data on income-support payments to each young person and his or her family with survey data collected from both the young person and from one of his or her parents (the mother in almost all cases). The administrative records go back to the time when the young person was about three years of age. The survey data provide detailed information about the youth's and the parent's current situation and activities,

<sup>&</sup>lt;sup>2</sup>Pollak (1988) argues that parents may have paternalistic rather than altruistic preferences. In other words, parents may care about their children's characteristics or behaviour rather than their utility or wellbeing per se.

<sup>&</sup>lt;sup>3</sup>This section is a slightly revised version of the data section in Cobb-Clark and Gørgens (2008). For more information about the project, see http://youthinfocus.anu.edu.au. For further information about the Youth in Focus data, see Breunig et al. (2007).

as well as information about events which occurred while the young person was growing up. In this section we discuss the analysis sample in more detail and introduce a measure of the family's history of income-support receipt.

The YIF Project uses Centrelink administrative records to identify all young people born in the six-months period between 1 October 1987 and 31 March 1988 who ever had contact (directly or indirectly) with the income-support system between January 1991 and March 2005 (inclusive). These administrative records contain high-quality, fortnightly information on the incidence of payment (not the amount) for all Australians who received a wide range of government benefits. The benefits include income support to the unemployed, the disabled, and low-income parents etc., as well as payments which are not considered "income support" such as the Family Tax Benefit and the Child Care Benefit. Although young people can appear in the administrative data if they have received payments themselves, most enter the system because a family member (usually a parent) received a payment which depended in part on the youth's relationship to the payee. Many families received income support at some point (e.g. Newstart Allowance or Parenting Payments); however, approximately 40 per cent of families did not. During the period covered by our data, these families received only Family Tax Benefits, Child Care Benefits or one of the precursors of these programs. The generosity of the Australian welfare system implies that nearly all of the young people in the relevant six-months birth cohort appear in the administrative data.<sup>4</sup>

The administrative data were used to stratify youths into one of six groups depending on the timing and the intensity of the family's receipt of income support (i.e. excluding aforementioned payments not considered "income support"). A stratified random sample of youths and a corresponding parent or guardian (in 96.5 per cent of cases the natural mother) was then selected from the administrative data for interview. Data from separate phone interviews with the youths and their parents as well as a self-completion questionnaire administered to the youths were then linked to the administrative data.

<sup>&</sup>lt;sup>4</sup>Note that Child Care Benefits are not means tested, and that only families in the top 20 per cent of the income distribution are ineligible for the Family Tax Benefit. Comparing the YIF youth sample with Australian Census data suggests that the administrative data capture about 98 per cent of the youths born in the period (Breunig et al., 2007).

Following best practice (see Groves et al., 2004), approach letters, incentive payments, repeated callbacks, and CATI were all used to maximise response rates. Nevertheless, as in all surveys, there was significant nonresponse in both wave 1 and wave 2 of the YIF surveys.<sup>5</sup> Systematic nonresponse is potentially a serious problem, which can be very damaging to statistical analysis. In particular, if subpopulations with particular outcomes or behaviours are not adequately represented in the achieved sample, statistical analysis may lead to very biased results. Fortunately, the nonresponse in the YIF surveys appears to be fixable. Firstly, specifically for this report, we have constructed weights which adjust for differences in the achieved sample proportions across stratum, sex and birth month (please see Appendix). While differences across stratum are a direct result of the sampling strategy, differences across sex and birth month may be systematic and related, for example, to the fact that males and older cohorts are more likely to leave home and have outdated contact information in the administrative records. If the relatively older males who participated in the survey are representative of all older males, then weighting fixes that dimension of the nonresponse problem. Secondly, a recent paper by Homel et al. (2010) compared youth educational and employment patterns as well as some family background variables across three datasets, including the YIF surveys, the Longitudinal Survey of Youth (2003 LSAY cohort), and the 2006 Census, using the same weights as in the present report. Their analysis shows that the patterns of youth activity and family background in YIF are similar to the other datasets.<sup>6</sup> These are very encouraging results, and we are reasonably confident that statistical analysis of YIF data will not result in heavily biased results.

Our summary measure of the family's history of income-support receipt is derived from the YIF stratification variable. Specifically, we identify three groups of young people as

<sup>&</sup>lt;sup>5</sup>Depending on which definition is used, the final response rates in wave 1 were between 30.1 and 37.2 per cent for youths and between 29.5 and 37.9 per cent for parents. About 73 per cent of youths who completed the phone interview also completed the self-completion questionnaire. More than 96 per cent of young people and 92 per cent of parents completing the survey consented to having this information linked to their administrative social security records. Although the final response rate differed somewhat across strata, these differences stem primarily from differences in contact rates rather than refusal rates (Breunig et al., 2007).

<sup>&</sup>lt;sup>6</sup>Interestingly, Year 12 completion rates are better estimated in the YIF data than in LSAY, presumably because young people from disadvantaged backgrounds are underrepresented in the latter.

follows: those from families with no history of income-support receipt while the youth was growing up, those from families receiving less than six years of support, and those from families that received income support for more than six years. For simplicity, we refer to these families as having received no income support (N), moderate support (M) and intensive support (I), respectively.

The achieved number of interviews in Wave 1 was 4079 for young people and 3964 for parents. Of these 2430 were matched. In Wave 2, 2362 youths were interviewed and of these 1554 can be matched to Wave 1 parent survey information. See also Table 1 for more information about Wave 1 sample size. Because of item nonresponse, some observations were dropped in calculating the estimates presented below (details are given in the table notes).

To facilitate comparability, the descriptive analysis presented in Section 4 is all based on weighted data. The weights scale the achieved Wave 1 and Wave 2 youth samples up to the original sampling frame (known as the TDS2 population). The regressions are based on matched youth-parent samples and are unweighted.<sup>7</sup> Further details about weighting are given in the Technical Appendix.

For simplicity, we refer to the youths as 18-year-olds in Wave 1 and 20-year-olds in Wave 2. In fact, at the time of their Wave 1 interviews 92 per cent of the focal youths were 18 years of age, while 4 per cent had turned 19 (4 per cent have unknown age).<sup>8</sup> The Wave 2 interviews were conducted over a longer time period, with the result that 76 per cent were aged 20 and 21 per cent were aged 21 at the time of the Wave 2 interview (3 per cent have unknown age). See Figure 1 for more information about the timing of the Youth in Focus survey data collection.

## 4 Descriptive analysis

We begin by using descriptive analysis to investigate the association between the educational and labour market investments that young Australians are making and the support

<sup>&</sup>lt;sup>7</sup>Regressions should never be weighted unless there are heteroskedasticity issues, see DuMouchel and Duncan (1983) and Wooldridge (2001).

<sup>&</sup>lt;sup>8</sup>These percentages are unweighted.

that they receive from their parents and "anyone else".<sup>9</sup> We are particularly interested in both the financial transfers young people receive from their parents as well as support that comes in the form of co-residence.<sup>10</sup> In order to shed additional light on the nature of parents' support for their young-adult children, we also consider the stated purpose of parents' financial transfers as well as whether the transfer is considered to be a loan or a gift. Finally, we assess the ways in which the pattern of support varies with a family's history of income-support receipt.

#### 4.1 The level of human capital investment

#### 4.1.1 Age 18

Table 2a provides information about the economic activity of the 18-year-old men and women in our sample (Wave 1 data). The rows of the table document the incidence of studying. The columns show the employment patterns. Approximately two-thirds of young people report that they are either in school, studying part time, or studying full time, while slightly more than one-third (35 per cent) say they are either not currently studying or have deferred their enrollment. Interestingly, there is virtually no gender gap in the study patterns of Australian youth. Despite these high enrollment rates in education, young Australians also have a firm attachment to the labour market. Approximately 39 per cent of young men are employed full time, a further 37 per cent are employed on a part-time basis, and one in eight are unemployed. Only 11 per cent are not in the labour force. In contrast to education enrollment rates, there is a large gender gap in employment rates. Young women are approximately half as likely as young men to work full time and are substantially more likely to work part time. Women are also slightly

<sup>&</sup>lt;sup>9</sup>The YIF survey asks youth to report about transfers received from their parents and "anyone else". This is the information we use in this report. For simplicity we refer to the amounts as "parental transfers". In Wave 1 of the survey, the parent respondent was asked corresponding information about transfers to the focal youth. Logically this amount should be smaller for each pair, since it does not include transfers from "anyone else". However, comparing the two amounts reveals large discrepancies in both directions. The correlation between the two amounts is 0.38. We leave further investigation of this measurement issue to future research.

<sup>&</sup>lt;sup>10</sup>Some young people live with relatives or other (older) adults. We determine whether the "co-reside" or "live independently" based on whether they consider any of the adults in their household a "parental figure" and on whether they consider themselves to be living independently or not.

more likely to report being unemployed or out of the labour market. Overall, young men are approximately three times as likely as young women to report being studying full time and working full time (15.9 versus 5.5 per cent respectively).<sup>11</sup>

Taken together, these results indicate that rates of economic inactivity among 18-yearolds — defined to be neither studying nor participating in the labour market — are very low: approximately 4 per cent of young women and 2 per cent of young men.<sup>12</sup>

#### 4.1.2 Age 20

Table 2b provides information from Wave 2 in a similar format as Table 2a. Only two respondents in the analysis sample are still in school (three in the entire Wave 2 data set), so we have combined them with the full-time students.

For males the proportion of full-time students is the same as in Wave 1, so the proportion of part-time students and the proportion of people not studying have gone up. For females, it seems almost as if the proportion previously in school has been allocated proportionally to the three other groups. The changes in the labour force patterns are similar for males and females: the proportion working full time has gone up, and the three other categories have declined. (However, the pattern from Wave 1 that young men are more likely to work full time and young women to work part time remains.) A closer look reveals that it is the category of combining full-time study with part-time employment and the category of working full time and not studying which have increased the most.

#### 4.2 The level of parental financial support

#### 4.2.1 Age 18

Table 3a demonstrates how the incidence and amount of financial transfers is related to whether or not 18-year-olds are living with their parents. Young people are more likely to be receiving financial transfers if they live with their parents (71 per cent) than if they do

 $<sup>^{11}{\</sup>rm Further}$  investigations revealed that three-quarters of the young men combining full-time work and full-time study are doing either apprenticeships or traineeships.

<sup>&</sup>lt;sup>12</sup>Almost half of the young women who are economically inactive report that they are careers looking after children or an ill or disabled person. Virtually none of the economically inactive young men in our sample report being careers.

not (61 per cent). The pattern of amounts they receive is slightly complicated, but overall young people who co-reside with their parents tend to receive smaller transfers.<sup>13</sup> Looking across the entire distribution of young people (including those who receive no financial transfers), at the median young people who co-reside receive a larger amount (\$600 per year) than those who do not (\$500 per year). However, at the 90th percentile the order is reversed with those co-residing receiving \$7,000 per year and those living independently receiving \$9,000 per year. If we focus attention on the sample of young people who do in fact receive financial transfers from their parents, the percentile transfer amounts are of course larger and the order is clearer. At the median, young people who receive transfers receive \$2,000 if living independently and \$1,500 if living with their parents. The figures at the 90th percentile are \$12,409 and \$9,000. Thus, those living apart tend to receive more. Note also that the dispersion in the amount of transfers is higher among those young people living independently than among those who continue to live with their parents.

Information about the intended purpose of parents' financial transfers and whether it is considered to be a gift or a loan is provided in Table 4a by the amount of money transferred. Specifically, the YIF respondents were asked what the intended purpose of any parental transfer was, before being asked about the total amount of transfer. Young people could indicate multiple purposes. Youth also reported whether the money was a gift or a loan which they would have to pay back in the future.

Those receiving small transfers (less than \$500 per year) are most likely to say that the money is intended to pay for general living expenses (38 per cent), utility or credit card bills (39 per cent) or HECS or other tuition fees (29 per cent). More than half of young people receiving very large transfers (more than \$10,000 per year) also indicate that the transfer is meant to pay for these same expenses. At the same time, fully 70 per cent of young people receiving a large transfer report that the money is intended for a car purchase. In the vast majority of cases (69 per cent) youth receiving small transfers reported that these are gifts, i.e. that they are not expected to repay anything, but one

<sup>&</sup>lt;sup>13</sup>The YIF respondents were asked if "your parents or anyone else [have] assisted you financially with any of the following in the last 12 months? Have they helped you with...", where the items are as in e.g. Table 4a. The list does not mention "pocket money", but presumably some respondents have interpreted "a general living allowance" to include pocket money.

in five (21 per cent) report that they are expected to pay back the entire amount. In contrast, youth receiving large transfers are only slightly less likely to report that the money is a gift (61 per cent), but they are much less likely to report having to pay back the entire amount (9 per cent).

#### 4.2.2 Age 20

It is clear from Table 3b that the incidence of parental transfers has fallen over the intervening two years. Overall, less than half now receive any money at all (47 per cent), and the proportion is approximately the same for those living independently (45 per cent) and those living with their parents (48 per cent). On the other hand, the amounts are higher for those who receive them. The last panel in the table shows that the median transfers (excluding zeros) is \$2,500 for those living independently while only \$1,500 for those co-residing. At the 90th percentile the amounts are substantially larger, \$15,000 and \$10,000 respectively. One possible explanation of this is that at age 18, some young people are receiving "serious" support while others receive "pocket money". At age 20, the flow of pocket money is drying out.

Consistent with the lower incidence of transfers, the proportion of people who report having received money for any specific purpose tends to be smaller at age 20 (see Table 4b). Some of the main exceptions are car purchases and help with bills for those who receive small amounts. Conversely, the proportion who receive money for a car has fallen substantially among those who receive over \$1,000 per year. (Perhaps they already have cars by age 20.)

The pattern of loans and gifts is even more polarised at age 20 compared with age 18, especially for those who receive large amounts: in almost all cases, either the entire amount is a gift (67–73 per cent) or the entire amount is a loan (10–20 per cent).

#### 4.3 Investment, co-residence, and transfers

#### 4.3.1 Age 18

We turn now to consider whether education and employment patterns are related to the amount of support young people are receiving from their parents. The first panel of Table 5a reports the proportion of 18-year-olds who are living with their parents across enrollment and employment categories. Overall, 82 per cent of the young people in our sample live with their parents at Wave 1. The incidence of co-residence, however, is related to the youth's student and employment status. Specifically, fully 93 per cent of young people who are still enrolled in secondary school at Wave 1 are co-residing with their parents, while this is true of only 79 per cent of their counterparts who are not currently studying. Co-residence rates are also higher among young people who are employed (81 to 86 per cent) than among those who are either unemployed (77 per cent) or out of the labour market (74 per cent). Thus, in contrast to recent evidence for the US and Canada (e.g. Card and Lemieux, 1997), our descriptive analysis does not suggest that Australian parents are using co-residence as a way of supporting their young-adult children in the face of bad labour market outcomes.

The second panel of Table 5a documents the incidence of financial transfers from parents. Overall, 69 per cent of young people report receiving a financial transfer from their parents in the previous 12 months. Full-time students are much more likely to receive money from their parents (approximately three quarters) than are those who are studying part time (59 per cent) or who are not currently studying (60 per cent). Young people who are employed full time are the least likely to receive transfers (59 per cent), while those who are employed part time are more likely to receive money from their parents (75 per cent) than are those who are either unemployed (70 per cent) or out of the labour market (70 per cent).

The remaining three panels of Table 5a provide information about the amount of money young people receive from their parents. We consider three alternative measures: the median amount received across the sample as a whole (including those who receive nothing); the amount received by the young person at the 90 percentile of the transfer distribution (again including those who receive nothing); and the median amount received amongst those who receive any transfers. The median 18-year-old receives \$600 annually from his or her parents, i.e., approximately \$12 per week or \$50 per month. In contrast, a young person at the 90th percentile of the entire transfer distribution (including those who receive nothing) receives almost 12 times this amount (\$7,000). Thus, the transfer distribution is highly skewed with many young people receiving no or only modest transfers from their parents and others receiving substantial sums. This skewness can also be seen by considering the median transfer conditional on receiving any financial transfer (see the last panel of Table 3a). Amongst those young people who receive any financial transfer at all, the median transfer amount is \$1,500 per year; nearly three times the median amount across the sample as a whole.

Broadly speaking, the pattern in the amount of financial transfers provided by parents to their 18-year-old children is only loosely related to variation in the incidence of financial transfers across categories of economic activity. This is most easily seen by considering how the median transfer amount among those receiving transfers varies with youths' student and employment status.<sup>14</sup> Note that due to small sample sizes the estimates are unreliable for three categories: school-students working full time, part-time students who are unemployed, and part-time students who are not in the labour force. Disregarding those, the median amount of money transferred is highest for young people studying full time: \$2,000 irrespective of labour force status, and second-highest for those who either study part time or work part time or both. Those not studying at all receive the least, especially if they are not working. Overall, this pattern suggests that parents may be transferring additional resources to young people in an effort to assist with the higher costs of post-secondary education rather than supporting their children with adverse labour market outcomes.

<sup>&</sup>lt;sup>14</sup>See the last panel of Table 3a. In contrast, panels 3 and 4 confound the incidence of transfer receipt with the amount received making it impossible to separately interpret the two effects.

Table 5b updates Table 5a for Wave 2. Note that at age 20 virtually no one is in school, and the few who are have been merged with the group of full-time students.

The incidence of co-residence has fallen from 82 per cent to less than 70 per cent. However, given this, the patterns remain similar. At age 20, people who study full time or part time have a higher probability of co-residing than those who do not study. This was also the case at age 18. And at age 20, those working part time have the highest probability of co-residing while those not in the labour force have the lowest probability of co-residing. This was also true at age 18.

The incidence of receiving financial transfers is highest for full-time students (57 per cent) and roughly the same for those studying part time (36 per cent) and those not studying (38 per cent). A similar pattern (although at a much higher level) was found at age 18. Interestingly, the probability of receiving a transfer is highest for unemployed youth (61 per cent) and lowest for young people who work full time (33 per cent). At age 18, full-time workers also are the least likely to receive transfers, but the part-time employed are the most likely to receive money from their parents.

The last panel of Table 5b shows median transfer amounts for those who receive them. Since the cell sample sizes are very small, and therefore the estimates are unreliable, we ignore the entries for those part-time students who are either unemployed or not in the labour force.<sup>15</sup> The results show that, as at age 18, those studying full time receive the most and, in fact, they receive the same amount as at age 18, namely \$2,000 per year. The exception is those who combine full-time study with full-time work; they receive only \$1,153. The second-highest median amounts flow to those who study part time or work part time (\$1,700–2,000 per year). As at age 18, those who do not study and do not work receive the least (\$500–1,000 per year).

<sup>&</sup>lt;sup>15</sup>We also ignore the third and the fourth panel in the table, which mostly reflects the large proportion of young people who do not receive any transfers at all.

#### 4.4 The role of family history of income-support receipt

#### 4.4.1 Age 18

Young Australian's human capital investments are closely related to their family background. Almost half (48 per cent) of youth growing up in families with a history of intensive income-support receipt are not currently studying at the time of the Wave 1 survey, while 15 per cent are not participating in the labour force (see Table 6a). In contrast, just over one quarter (27 per cent) of young people in families with no history of income-support receipt are not currently studying at Wave 1, and less than one in ten (9 per cent) are not participating in the labour market. These results are consistent with previous results that point to a strong link between young people's investments in human capital and the socio-economic status of their families (see Cobb-Clark and Sartbayeva, 2007; Barón, 2008). Although other explanations are possible, this may be an indication that socio-economic disadvantage constrains youths' ability to make educational or labour market investments by limiting the extent to which parents are able to contribute to financing those investments.

We consider this possibility by documenting the relationship between the parental support youth are receiving and their families' income-support histories (see Table 7a). We find that young people are more likely to live independently at age 18 the more their families relied on income support in the past. In particular, 13 per cent of youth in families with no history of income-support receipt had moved out of their parents' home at age 18, while young people in families with a history of intensive income-support receipt are nearly twice as likely (25 per cent) to be living independently. On the other hand, young people who received financial transfers are more likely to be living in their parents' (or someone else's) investment property for low rent if their parents received intensive income support in the past (9 versus 6 per cent, last panel of the table). However, we suspect that this pattern may be due to difference in interpreting the question. It is possible that many young people have answered yes if they live in anyone's (not necessarily parents') investment property paying low, but not subsidised rent.<sup>16</sup>

 $<sup>^{16}\</sup>mathrm{In}$  the full parent sample, about 19% of parents with no history of receipt of income support report

The second panel of Table 7a shows that the percentage of youths who receive any financial transfers from their parents falls dramatically as the family's history of reliance on income support increases. Specifically, the proportion of young people *not* receiving any money from their parents is 45 per cent in families with a history of intensive incomesupport receipt (I group) and less than half of this (21 per cent) among youths in families with no history of income-support receipt (N group). Further details are shown in the third panel of Table 7a. The proportion of young people who both co-reside and receive a transfer falls very substantially the longer the family was receiving income support in the past. Conversely, the proportion of young people who neither co-reside nor receive money is negligible (2 per cent) for youths whose family didn't receive income support but nearly 15 per cent for those youths whose family received intensive income support. A similar, although less dramatic, difference can be seen for those who still live with their parents but receive no transfer: this group makes up 19 per cent of youths from families with a history of no income-support receipt but 31 per cent of youths from families with a history of intensive income-support receipt. Only the proportion of young people who are independent and receive a transfer is about the same for all groups.

The amount of transfers follow a similar pattern as the incidence. Young people whose family has a history of intensive receipt of income support tend to receive lower transfer amounts than others (only \$1,000 at the median) conditional on receiving something. In comparison, those in families with no income-support receipt history receive twice as much (\$2,000) at the median.

Generally, young people are more likely to report having received money for each specific purpose surveyed if their families have received less income support in the past (see Table 8a). This pattern is consistent with the larger amounts received and suggests that parents with no income-support background are providing financial support for a wider range of purposes. The exception is that the incidence of financial transfers to help pay fines is slightly higher for young people whose family has a history of intensive receipt of income support. Interestingly, the proportion of the financial transfers which is a loan

having income from rental properties in the previous financial year, compared to 9% and 3% of families with histories of moderate and intensive receipt (unweighted estimates).

to be paid back is remarkably similar for the three groups.

Finally, we consider the extent to which co-residence and financial transfers either substitute for or complement one another in supporting young people. Table 9a presents information about the way in which the pattern of financial support across income-support categories differs for those young people who do and do not co-reside with their parents. Overall, the young people in our sample are less likely to be receiving financial transfers from their parents if they are living independently (61 per cent) than if they are coresiding with their parents (71 per cent). Transfer amounts — for those individuals receiving them — are slightly larger for young people who live independently. At the median, young people living with their parents received \$1,500 while those living apart received \$2,000. The overall pattern is driven entirely by the group of families with a history of no income-support receipt, whose youths receive 50 per cent more money if they live independently, since youths from other groups receive either less (M) or the same amount (I) if the live independently.

#### 4.4.2 Age 20

Comparing Table 6a and Table 6b shows a very interesting result. While the proportion of full-time students from families who received no or moderate income support (N- and M- groups) is virtually unchanged between age 18 and age 20, the proportion has increased from 36 per cent to 42 per cent of young people from families who received intensive income support (I-group). For the former two groups, the proportions who study part time or are not studying have increased. For the latter group, the proportion who are not studying have increased. Many factors are at play here (such as grade repetition, length of education programs undertaken, etc.), but the patterns could also mean that young people from disadvantaged backgrounds are "catching up", at least when it comes to education.

The second panel of Table 6b shows that full-time employment is more prevalent at age 20 than at age 18, which is not surprising. A positive finding is that the proportion of young people from the I-group who are unemployed or out of the labour force has come down, although it is still higher than for the two other groups.

The proportions who co-reside or receive a financial transfer from their parents are lower at age 20 but, given that, the patterns across family groups is similar to that at age 18 (see Table 7b). Those from families with a history of no income-support receipt are more likely to co-reside and more likely to receive money than those from families with a history of intensive income-support receipt. The breakdown in the third panel of Table 7b shows a marked shift towards living independently for young people from all family groups. This results in a more even distribution at age 20 than at age 18. The amount of transfers for those who get them have increased a bit, especially for youths from families with a history of no receipt of income support.

Table 8b shows that young people from the N-group are more likely to report having received money for accommodation while studying and for educational fees, while those from the I-group are more likely to report having received money for utility or credit card bills and for fines. In other respects, young people from different family backgrounds seem to receive money for similar purposes. The second panel shows the now familiar polarised pattern — the vast majority of financial transfers seem to be either entirely gifts or entirely loans. At age 20, the proportion of young people from the N-group who report having to pay back all of the money has fallen a bit compared to at age 18, while it has increased for those from the I-group.

Finally, Table 9b shows financial transfers by the young people's living arrangements and family background. There are two points to note. First, the incidence of receiving a transfer is more or less the same for young people living independently or with their parents, *except* for young people from families who have received intensive income support — they are much more likely to receive money if they co-reside (39 per cent versus 31 per cent). Second, the size of the transfer for those who receive any tends to be larger for those who live independently, especially for young people from families who received moderate or no income support in the past. At the median, the amounts are \$4,000, \$2,000 and \$1,000 across family group for young people living independently and \$2,000, \$1,153 and \$1,153 for young people living with their parents. This pattern may indicate that co-residence and financial transfers are "substitute" ways for parents to support their young-adult children as they find their way in the educational system and the labour market. Or it may reflect a society where (some) young people are expected to leave their parents' home in their early twenties and (some) parents support them in this process.

### 5 Regression analysis

In this section of the report, we present the results of regression models of the determinants of, first, parental support for young people (specifically co-residence and financial transfers) and, second, young people's investments in human capital (specifically student and employment status). Our regression models permit us to simultaneously consider a number of factors that might reasonably be related to a young person's investment in their own human capital and their parents' ability and willingness to support these investments. The models discussed below incorporate those factors that the previous literature identifies as being important in understanding outcomes for young men and women.<sup>17</sup> We estimate separate models using YIF data from Wave 1 (when youth are aged 18) and Wave 2 (when youth are aged 20). Comparing results across waves sheds light on how parental support through co-residence evolves as young people age.

Given our limited sample size, we have chosen to estimate relatively parsimonious specifications of each model. In each case, the estimation model has been chosen to fit the nature of the outcome being considered. Probit models are used to analyse the binomial (yes versus no) nature of co-residence with parents. In contrast, tobit models are used to analyse the amount of financial transfers provided to young people. The advantage of the tobit model is that it allows us to take into account both continuous positive transfer amounts as well as the large number of individuals who do not receive transfers at all. Finally, multinomial logit models are used to analyse student and employment status.

<sup>&</sup>lt;sup>17</sup>The models include indicators of the family's history of receipt of income support, parental income in the previous financial year (excluding income support from the government), and indicators of the youth's study and work activities in various combinations as shown in the main tables. In addition, all of models include indicators for the youth's birth year, gender, having a foreign-born parent, state or territory of residence, the education and occupational status (ANU4) of either the mother or the mother's current partner whichever is higher, the mothers' age, her number of children, and her partnership status. Results for these latter variables are shown in the appendix tables.

In particular, we estimate the determinants of the probability that each young person falls into one of the following categories at age 18: i) secondary-school student; ii) fulltime post-secondary student; iii) part-time post-secondary student; and iv) not currently studying/deferred. By Wave 2, virtually all of our respondents have left secondary school and so are assigned to one of the latter three educational categories. Finally, we also separately estimate the determinants of the probability that individuals in Waves 1 and 2 are: i) employed full time; ii) employed part time; iii) unemployed; and iv) not in the labour market.

Economic theory generally implies that all choices of a decision maker depend on all exogenous variables. That is, a decision maker will take into account all constraints (jointly) when making her optimal choices (jointly). The regression models presented below therefore contain essentially the same set of exogenous explanatory variables. In addition, many of the models include endogenous variables, such as other choices by parents and young people, as explanatory variables. This enables us to discuss the relationships between the choice variables "as they are". It is important to emphasise that these models do not explain why the relationships exist, nor can they be used to predict the effects of changes in policy. If policy, or other exogenous factors, were to change then the relationships (estimated coefficients) are likely to change as well. In other words, it is not possible to draw causal inference from these models. For example, suppose we find that young people who live independently tend to receive higher parental transfers than those who co-reside. Then we cannot conclude that higher parental transfers cause young people to move out earlier, since it is possible that those who live independently would have received larger transfers regardless. We continue to highlight potential pitfalls in the discussion of the results.

For ease of interpretation we present and discuss selected results that highlight the relationship between human capital investment, parental support, and the family's history of income-support receipt. Complete results are presented in the appendix tables. All results are presented as marginal effects (with standard errors) evaluated at the mean.

# 5.1 The effect of income-support receipt history on parental support

#### 5.1.1 Co-residence at age 18

We first consider the association between the probability that a young person has left his or her parents' home by age 18 and his or her family's history of income-support receipt. We estimate four alternative probit models. The first controls only for the history of income-support receipt and a set of family background variables. The second adds controls for parental housedhold income, while the third also accounts for financial transfers from parents. Finally, the fourth model adds controls for the youth's student and employment status. For ease of interpretation, Table 10a presents results (marginal effects and standard errors) only for the variables of interest. Estimated results for the other background controls can be found in Table 14a in the appendix tables.

We find that, even after we control for a series of background characteristics, there continues to be a negative relationship between the family's history of income-support receipt and the propensity for young people to live at home at age 18 (see Model 1). Specifically, a history of intensive income-support receipt is associated with at 5.3 percentage point (pp) lower probability of co-residing. This effect is rather modest, however, given that on average 82 per cent of the 18-year-olds in our sample are living with at least one parent.

To what extent are these relationships explained by parental income? We investigate this by adding parental income to the baseline model (see Model 2). Note that parental income is defined as the total household income, excluding income support from the government, for the parent who participated in the survey. Interestingly, higher parental income is associated with a higher probability of young people remaining at home. Each 1 per cent increase in parental income is associated with a 1.6pp increase in the probability of co-residing. Moreover, the relationship between co-residence and intensive income-support receipt falls slightly to 4.3pp and becomes statistically insignificant once we control for parental income, while the association between moderate income-support receipt and coresidence (3.6pp) remains much the same. Thus, low parental income might partially explain why youth in income-support intensive families are less likely to remain at home, but appears to have little to do with the estimated effect of moderate income-support receipt.

There is a weak, but statistically significant, negative relationship between co-residence with and financial transfers from parents. In effect, young people who receive more financial support from their parents are less likely to continue to live at home (see Model 3). Every \$1,000 per year of financial transfers is associated with a 0.4 per cent lower probability of living at home. Given that decisions about living arrangements and financial support are likely to be made jointly, our estimates reflect associations rather than causal effects. We cannot conclude, therefore, that transferring larger sums to young people would cause them to leave home earlier. It is interesting, however, that this association is negative. It appears to be the case that co-residence and financial transfers are substitute forms of youth support everything else equal. It is also interesting that when we compare young people who receive similar amounts of money from their parents, the negative relationship between the history of income-support receipt and co-residence becomes slightly stronger. Those with a history of moderate income-support receipt are 4.5pp less likely to be co-residing, while those receiving intensive income support are 5.4pp less likely to remain at home with their parents.

Finally, in Model 4 we also account for whether or not young people are in school, studying full time, studying part time or not engaged in study at all. Labour market activities are accounted for through the inclusion of controls for whether or not young people are employed full time, employed part time, or unemployed as opposed to out of the labour market altogether. Not surprisingly, 18-year-olds who are still in secondary school are much more likely than those who have completed school (13.5pp) to live at home with their parents. There is no significant difference in living arrangements, however, among those who are continuing to study beyond secondary school (either part time or full time) and those who are no longer studying at all. Youth who are working part time (14.2pp), working full time (11.1pp), or unemployed (6.0pp) are all more likely than those not in the labour market to co-reside with parents. The estimated link between the history of income-support receipt and living arrangements is somewhat weaker, and not statistically significant, once we account for young people's student and employment status.

Taken together, the estimated effect of a history of income-support receipt on living arrangements at age 18 are remarkably consistent. As we include additional controls into our model, the estimated effects of family income-support receipt history do vary slightly: between -4.5pp and -3.4pp for those with a history of moderate receipt of support and between -5.5pp and -4.3pp for those with a history of intensive receipt. However, they are always modest in size, uniformly negative, and only marginally significant. Consequently, it does not appear to be the case that there is a strong relationship between a family history of income-support receipt and youths' living arrangements at age 18 once income, financial transfers, the young person's student and employment status, and other background factors are taken into account. On the other hand, there is a strong link between young people's study and employment patterns and the support they receive at age 18 from their parents through co-residence.

#### 5.1.2 Co-residence at age 20

Estimates of the factors underlying young people's living arrangements at age 20 are presented in Table 10b (and Appendix Table 14b). We find that 20-year-olds are less likely to be co-residing with their parents if their families have a history of either moderate (6.5pp) or intensive (6.0pp) income-support receipt than if their families have no history of income support (see Model 4). These disparities in living arrangements across different types of families are larger than the corresponding gaps at age 18, particularly when we consider that 20-year-olds are less likely to live at home (69.2 per cent) compared with 18-year-olds (82.1 per cent). Our Wave 2 results, however, are less precisely estimated because of the smaller number of respondents at Wave 2. Consequently, only the estimate for moderate income-support receipt is statistically significant at conventional levels.

While higher parental income is associated with 18-year-olds continuing to live with their parents (see Table 10a), parental income (measured at Wave 1) is not related to the living arrangements of 20-year-olds. Unfortunately, given the design of the YIF data, we are unable to control for Wave 2 parental income. Consequently, the lack of a significant income effect may simply indicate that previous income levels are not relevant to current living arrangements. Alternatively, it may also be the case that as young people age their living arrangements become less sensitive to the income levels of their parents and more responsive to other factors. Unfortunately, we are unable to differentiate between these two possibilities.

The tradeoff between co-residential and financial support that is observed among 18year-olds (see Table 10a), however, persists and is in fact stronger among 20-year-olds than among 18-year-olds (see Table 10b). In particular, every \$1,000 per year of financial transfers is associated with a 1.2 per cent lower probability of living at home. Interestingly, the magnitude of this relationship is unchanged when we account for the youth's student and employment status (see Models 3 and 4). Thus, the tradeoff between financial and co-residential support is independent of youths' investments in education and the labour market. Unfortunately, the simultaneous nature of decisions about living arrangements and financial support leaves us unable to say anything about whether increased transfers cause young people to leave home or whether parents simply transfer more to young people once they have made the decision to move out. Nonetheless, it is interesting that co-residence and financial transfers appear to be substitute forms of youth support.

It is also interesting that the association between youths' employment and student status on the one hand and their propensity to live with their parents on the other is not the same at age 20 as it is at age 18. In particular, 20-year-olds who are studying part time are substantially more likely (9.4 pp) than their counterparts who are not studying at all to be co-residing. In contrast, it is only 18-year-olds who have not yet left secondary school who are significantly more likely to live with their parents. There is no significant difference in the living arrangements of 18-year-olds who are and who are not undertaking post-secondary education. Moreover, 20-year-olds are more likely to be living at home if they are employed full time (11.1pp), employed part time (14.2pp), or are unemployed (6.0pp). Young people who are not in the labour force (perhaps because they are engaged in full-time study) are significantly more likely to live apart from their parents. The association between employment status and living arrangements is somewhat stronger at age 20 than at age 18, particularly for those young people who are either unemployed or working part time. For example, 18-year-olds who are working part time are 14.2pp more likely to live at home, while 20-year-olds working part time are 18.5pp more likely to be living at home.

Overall, our results indicate that there is a negative association between a family history of income-support receipt and co-residence at age 20, in the sense that young people from families with a history of moderate or intensive receipt are less likely to coreside than young people from families who have not received income support. There is similar to the pattern at age 18, but the effect is somewhat larger at age 20. There is also a tradeoff between co-residential and financial support at both ages. While student and employment status are clearly related to living arrangements, there is evidence that the nature of this relationship differs between ages 18 and 20

#### 5.1.3 Financial transfers at age 18

We now turn to consider how financial transfers from parents vary with family history of income-support receipt. As before, we estimate four alternative specifications, this time using a tobit model to account for both the probability of receiving any transfer at all and the amount of those transfers. Table 11a presents results (marginal effects and standard errors) for the variables of interest, while estimated results for the other background controls can be found in Appendix Table 15a. Eighteen-year-olds growing up on income support receive fewer financial transfers from their parents. Specifically, youth in families with a history of moderate income-support receipt receive approximately \$1,250 less each year at age 18 than do those in families with no interaction with the income-support system. Youth in families with a history of intensive receipt receive nearly \$2,400 less (see Model 1). These estimates are derived from our baseline model which controls only for family background characteristics and excludes parental income. Once we control for parental income, the estimated negative effect of the family's history of income-support receipt falls only slightly, remains substantial, and is statistically significant. Even after accounting for the lower incomes of income-support families, 18-year-olds are estimated to receive \$1,200 less each year from their parents if they have had moderate exposure to the income-support system and more than \$1,900 less each year if they have received intensive income support (see Model 2).

Consistent with our results thus far, we find a positive association between living independently and the amount of financial resources received from parents. Specifically, 18-year-olds living apart from their parents get \$966 more each year in transfers (see Model 3). As discussed above, this relationship is not necessarily causal, but it does suggest that parents on average increase their level of financial support to compensate for their lack of co-residential support. The estimated relationship between the family's history income-support receipt and parental transfers is virtually unchanged once we account for whether or not young people are living with their families.

Financial transfers also depend on youths' involvement in the labour market or continued education. These effects are imprecisely estimated, however, making it difficult to draw firm conclusions. Young people who have completed their secondary education and are continuing their education full time receive \$1,380 more on average than their counterparts who have also completed secondary school but are not currently studying (see Model 4). This relationship is statistically significant. Youths who are in school receive \$792 more than those who have left school and are not studying, while those who study part time receive \$655 less, though neither result is statistically significant. Moreover, young people who are employed full time receive the same transfer amount as those who are not active in the labour market at all, while those who are either unemployed or employed part time receive roughly \$600 per year more. None of these employment effects are statistically significant, however.

In sum, unlike co-residential support, financial support from parents is strongly related to the family's history of income-support receipt. Young people in families with a history of moderate income-support receipt receive approximately \$100 per month less, while those in families with a history of intensive income-support receipt receive roughly \$200 per month less. These differences are quite substantial considering that median annual transfer amounts (for those youth that receive them) are \$2,000 per year if young people are living independently and \$1,500 per year if they are living with their parents. Moreover, controlling for differences in parental income, living arrangements, and youths' educational and labour market activities leaves the estimates virtually unchanged. Thus, the lower transfer amounts in families who received intensive income support is not the result of differences in family characteristics.

#### 5.1.4 Financial transfers at age 20

Table 11b provides information about the factors underlying the financial transfers that parents make to their 20-year-old children (see also Appendix Table 15b). As before, we have used a tobit model which allows us to account for both the propensity to receive any transfers at all as well as the amount of those transfers where these occur. The estimates in Table 11b which pertain to 20-year-olds can be compared to those in Table 11a which pertain to 18-year-olds. The negative association between having a family history of income-support receipt and the amount of financial support received persists and is substantially stronger at age 20 than at age 18. Twenty-year-olds in families with a history of moderate income-support receive approximately \$1,920 less per year from their parents than do 20-year-olds growing up in families with no history of incomesupport receipt. Those with a family history of intensive income-support receipt receive \$3,145 less each year. In comparison, the disparity in financial support at age 18 is \$1,191 (moderate income support) and \$1,877 (intensive income support) respectfully. Thus, the nature of a family's previous interaction with the income-support system is strongly related to the extent to which the family provides financial support to its children as they become adults themselves.

As was the case for co-residence, there is no link between the Wave 1 income of households and the amount of financial resources provided to 20-year-olds at Wave 2. In contrast, 18-year-olds receive more in financial transfers as their parents' income increases. Unfortunately, we do not have information about parental income at Wave 2 because mothers were not reinterviewed. We therefore are unable to determine whether the lack of an association between parental income and financial transfers at Wave 2 is the result of a weakening of the importance of parental income as young people age and become more independent or results from our inability to measure income at Wave 2.

The tradeoff between co-residential and financial support that exists at age 18 intensifies at age 20. Young people who continue to co-reside with their parents at age 20 receive on average \$2,719 less per year in financial transfers from their parents than their counterparts who are living independently. At age 18, the disparity in financial support provided to non-co-residing and co-residing youth is approximately one third as large (\$987). Though this is not necessarily a causal relationship, it is consistent with theoretical models of household interactions which suggest that households tradeoff one form of support against the other.

At the same time, the additional financial support provided by parents to their children who are studying full time almost doubles from \$1,380 at age 18 to \$2,368 at age 20. Moreover, 20-year-olds who are employed full time receive on average \$3,378 less each year in financial transfers from their parents than do their peers who are employed part time, unemployed, or not in the labour force at all.

The fact that these associations are stronger at age 20 than at age 18 suggests that parental transfers become more targeted as young people age. In particular, parents seem to direct more financial transfers towards their young-adult children who are not living at home or who are studying full time and away from their children who are working full time. The disparity in the support provided by families that do and do not have a history of income-support receipt also grows larger. We cannot interpret these associations in a causal way. We do not know, for example, whether higher financial transfers from parents cause young people to study full time as opposed to part time or not at all. Still, the patterns are consistent with theoretical models of household behaviour in which families make complex, joint decisions about how to allocate resources across family members.

#### 5.2 The effect of parental support on youth outcomes

Is young people's enrollment in education and participation in the labour market related to the amount of co-residential or financial support they receive from their parents? We address this question by estimating a multinomial logit model of, first, youths' student status (i.e., in school, out of school/studying full time, out of school/studying part time, or not studying) and, second, youths' labour market status (employed full time, employed part time, unemployed, or not participating). In each case, we provide selected marginal effects (and standard errors) from a model with a full set of controls including: history of income-support receipt, family background, parental income, living arrangements and financial transfers. Full results are provided in the appendix tables.

#### 5.2.1 Student status at age 18

Table 12a presents the results from our model of student status estimated using Wave 1 data when young people are aged 18. We find that at age 18 there is no significant effect of a family history of income-support receipt on young people's student status once we account for family background, parental income, parental support (both co-residence and financial transfers), and youths' employment status. In other words, young people in families with a history of intensive income-support receipt are as likely as otherwise similar young people with no history of income-support receipt to be i) still in school, ii) out of school and studying full time, iii) out of school and studying part time, or iv) not studying at all.

How are study outcomes related to parental support? Consistent with our previous results, there is a positive association between continuing to live with one's parents and being still in school at age 18. Young people who are living at home are more likely than their peers to have not yet completed secondary school (3.1pp). Moreover, young people who receive financial transfers from their parents are more likely to be studying full time, on the order of 1pp per \$1,000 per year, and less likely to be studying part time or not studying.

Finally, there is a close relationship between young people's participation in study

on the one hand and work on the other. Young people who participate in the labour market (i.e., those who are employed full time, employed part time, or unemployed) are significantly less likely to also be in secondary school. Young people who are working full time or who are unemployed are significantly less likely to be engaged in full-time post-secondary education (22.2pp and 13.1pp respectively) and are significantly more likely to be not studying at all (19.9pp and 16.3pp respectively). Young people who are working full time are also significantly more likely to be enrolled in part-time post-secondary education (10.3pp). This tradeoff between full-time study and full-time work is not particularly surprising in light of the time constraints that young people face.

#### 5.2.2 Student status at age 20

Education outcomes at age 18 (see Table 12a) can be contrasted to those at age 20 (see Table 12b). By age 20, virtually all of the young people in our sample have left secondary school. Some have gone on to study full or part time, while others are not studying at all. In this section, we consider how the factors underlying young people's enrollment in education differs across time. As was the case at age 18, we find that there is no significant difference in the probability that 20-year-olds with different family income-support receipt histories are enrolled in post-secondary education once we control for other factors such as family background, parental income, parental support, and employment status. Twenty-year-olds growing up in families reliant on the income-support system are as likely as their peers with no history of income-support receipt to be engaged in either part-time or full-time post-secondary education. parental income — which is unimportant in understanding 18-year-olds' student status — is closely related to post-secondary education at age 20. Specifically, for every 1 per cent increase in parent's Wave 1 income, young people are 4.5pp more likely to be studying full time and 4.3pp less likely to be not studying at all. These effects are particularly large in magnitude when we consider that first, approximately half of 20-year-olds study full time and second, that we are measuring the relationship between income two years earlier and current enrollment status. In contrast, co-residential support is unrelated to the likelihood that young people are studying full time or not studying at all. There is a slightly higher probability (3.2pp) that 20-year-olds are studying part time if they are living with their parents in comparison to their peers who are living independently. This effect is modest, somewhat imprecisely estimated, however, and is only marginally significant. The lack of a strong relationship between post-secondary education and living arrangements at age 20 is consistent with similar results at age 18. Living arrangements are only strongly related to secondary school enrollment. Similarly, the relationship between financial transfers and post-secondary education is much the same at age 20 as it is at age 18. Each additional \$1,000 in financial support from parents is associated with an increase of 1pp in the probability that 20year-olds are studying full time and a 0.6pp decrease in the probability that they are not studying at all. Overall, the relationship — both direction and magnitude — between the co-residential and financial support that parents are providing to youth and youths' enrollment in post-secondary education is relatively stable over time.

Finally, the relationship between 20-year-olds' enrollment in post-secondary education and their employment in the labour market is much as we would expect given their overall time constraints. Young people are less likely to be studying full time if they are employed full time (43.0pp) or unemployed (19.2pp). Full-time employment is associated with a higher probability of being a part-time student (10.3pp) or not studying at all (32.7pp). Finally, unemployment is associated with a higher probability of not studying (23.1pp). The pattern of these relationships is much the same at age 20 and at age 18. The magnitudes are larger, however, indicating a stronger link between labour market and educational investments among 20-year-olds.

#### 5.2.3 Employment at age 18

We turn now to consider the factors that underpin 18-year-olds' employment status (see Table 13a). We find that young people's employment outcomes at age 18 are significantly related to their families' income-support histories despite extensive controls for family background, parental income, and parental support. Specifically, young people growing up in families that received moderate income support are significantly less likely (5.9pp)

to be employed part time and significantly more likely (4.4pp) to be out of the labour market entirely than are otherwise similar youth with no family history of income-support receipt. Moreover, having a family history of intensive income-support receipt is associated with a 8.8pp lower probability of part-time employment, a 9.1pp higher probability of unemployment, and a 5.0pp higher probability of not participating in the labour market. Thus, a family history of income-support receipt is associated with lower employment levels among Australian youth. On the other hand, there is little evidence that parental income affects young people's labour market outcomes.

Parental support is also associated with employment status, and the effects of coresidential support and financial support are in the same direction. Co-residence is associated with a higher probability of part-time employment (13.5pp) and lower probabilities of unemployment (4.2pp) and nonparticipation (12.6pp). At the same time, young people who receive financial transfers from their parents are more likely to be employed part time, on the order of 0.4pp per \$1,000 per year. Thus, parents do not appear to be targeting co-residential and financial support to their 18-year-old children who are experiencing poorer labour market outcomes.

As before, there is a link between young people's involvement in the labour market and their involvement in education. Those 18-year-olds who are still in secondary school are substantially less likely than those not studying at all to be employed full time (32.0pp), and are more likely to be out of the labour market. Those who are engaged in postsecondary full-time study are also significantly less likely than those not studying to be employed full time (16.0pp) and are instead more likely (15.1pp) to be employed part time. Finally, those who are studying part time are significantly more likely to be working full time (24.8pp), but are 17.7pp less likely to be employed part time and are 7.2pp less likely to be unemployed, compared to those not in the labour force.

#### 5.2.4 Employment at age 20

Table 13b outlines the Wave 2 relationship between young people's employment status, family income-support receipt history, parental income, and parental support. Compari-

son of these results to those in Table 13a highlights important changes in these relationships over time as young Australians move from being 18 to 20 years old.

In particular, the association between family income-support receipt history and employment outcomes is very different across ages. At age 18, there is clear evidence that having a family history of income-support receipt is associated with a lower probability of part-time employment and a higher probability of unemployment or nonparticipation. At age 20, these relationships are much weaker. The probability of being unemployed is 5.5pp higher for youth whose parents received moderate income support while they were growing up. There is also some evidence, for example, that a history of moderate income support is linked to a lower probability of part-time employment for 20-year-olds, however, this effect is not statistically significant at conventional levels. Moreover, moderate income-support receipt is related to a 3.7pp reduction (rather than an increase) in the likelihood that 20-year-olds are not participating in the labour market at all. Even more importantly, 20-year-olds growing up in families with a history of intensive income support and 20-year-olds with no family history of income support at all have statistically identical employment patterns. Thus, the link between social assistance receipt in childhood and adolescence appears to weaken as young people age.

Each one per cent increase in parental income (again measured at Wave 1) is associated with a 2.4 pp reduction in the probability that a 20-year-old is out of the labour market entirely. In contrast, there is no relationship between parents' Wave 1 income and young people's employment status both measured when young people are age 18. To the extent that parents' income is relatively persistent over time, these results suggest that higher parental income may promote 20-year-olds participation in the labour market. Is coresidential or financial support from parents related to the employment of 20-year-olds? By and large, the relationship between living arrangements and employment outcomes is much the same at age 20 as it was at age 18. Youth who continue to live with their parents are significantly more likely to work part time (11.5pp) and are significantly less likely to be unemployed (4.1pp) or out of the labour market entirely (6.0pp). The magnitude of the first two effects is virtually identical to that estimated in Wave 1 when young people
are 18 years of age. However, the disparity in rates of nonparticipation between those who are and who are not co-residing is less than half as large at age 20 (6.0pp) as it was at age 18 (12.6pp). In contrast, there is very little evidence that parental financial transfers are related to youths' employment status.

Finally, the relationship between employment status on the one hand and student status on the other appears to be very stable over the two waves. Full-time post-secondary education imposes severe constraints on full-time employment. Those 20-year-olds who are studying full time are 40.7pp less likely than those not studying at all to be employed full time as well. In contrast, full-time study is associated with a higher probability of part-time employment (36.7pp) and nonparticipation (5.7pp). Part-time study, on the other hand, is related to a 5.8pp lower probability of being unemployed. The direction and magnitude of these effects are very similar for 18- and 20-year-olds.

# 6 Concluding remarks

This paper analyses data from the Youth in Focus Project to assess how young Australians growing up in different family circumstances are supported by their parents through either co-residence or financial transfers as well as how this support (or the lack of it) is related to their educational and labour market outcomes. Our particular interest is in beginning to understand whether economic and social disadvantage (as measured by the family's history of receipt of income support) limits parents' ability to support their young-adult children and whether limited parental support has important consequences for young people's human capital investments.

Our main results are as follows:

- 1. Consistent with theoretical predictions, there is a tradeoff in the support provided through co-residence versus financial transfers. Young people who continue to live with their parents receive fewer financial transfers than otherwise similar young people who live apart.
- 2. Young people growing up in families with a history of income-support receipt are

less likely to live at home at age 20 than are their peers. There is less evidence that family income-support receipt history is strongly related to living arrangements at age 18.

- 3. Eighteen-year-olds receive more financial support from their parents, everything else equal, if their families have had no interaction with the income-support system. The disparity in the financial support provided by families that do and do not have a history of income-support receipt is larger at age 20 than at age 18.
- 4. Financial support also appears to be more targeted at age 20 than at age 18. Specifically, conditional on the youth's study and employment status, parents direct larger financial transfers towards their children who are not living at home or who are studying full time and away from their children who are working full time.
- 5. There is no significant effect of a family history of income-support receipt on young people's student status at either age 18 or age 20 once we account for family background, parental income, parental support (both co-residence and financial transfers), and youths' employment status.
- 6. In contrast, having a family history of income-support receipt at age 18 is associated with a lower probability of part-time employment and a higher probability of unemployment or nonparticipation. At age 20, these relationships are much weaker.
- 7. Enrollment in post-secondary education is not closely related to co-residential support, but is positively related to financial support.
- 8. Regarding employment status, youth who continue to live with their parents are significantly more likely to work part time and are significantly less likely to be unemployed or out of the labour market entirely. In contrast, there is very little evidence that youths' employment status is related to parental financial transfers.

It is important to stress that these relationships are only associations and cannot be interpreted as causal. For example, it is not clear whether some full-time students have jobs and do not receive parental transfers because their parents can't afford to provide sufficient financial assistance or because parents aren't providing assistance because their young-adult children are earning their own money and don't need additional support.

An interesting extension of the research presented in this paper is to consider the effects of the "environment" in which families make their decisions and choices. The decision to co-reside or not is likely to be related to, among other factors, the rent a young person can expect to pay if living independently on the one hand and on the size of the family dwelling and the number of people living there on the other hand. The social relationship between household members will also play a role. The decision to study or work is likely to depend on factors such as the young person's academic aptitude, the distance to educational institutions, and local labour market conditions (unemployment and vacancy rates). The amount of parental transfer is likely to depend on parental disposable income and wealth, available government income support programs etc.

Since family decisions depend on the "environment" and the environment is less likely to be affected by family decisions, it is possible to estimate causal effects.<sup>18</sup> The environmental factors are likely to differ greatly across families from different socio-economic classes. Estimating how much of the difference in youth outcomes can be attributed to the environment will be highly useful and valuable, not the least because many environmental factors are amenable to manipulation by public policy. For example, the model can be used to predict the effect of a general increase in rent payments (say an interest rate hike) on the proportion of young people who co-reside with their parents. Or the effect of an increase in parental disposable income (say a general tax cut) on the incidence and amounts of parental transfers. A third example is the effect of adverse labour market conditions (say a recession) on young people's choice between work and study.

<sup>&</sup>lt;sup>18</sup>There will be a problem if families can choose or manipulate their environment.

### A Technical appendix

### Weighting

All results presented in the descriptive analysis are weighted. (All regressions are unweighted.) The weights were constructed by dividing the total number of focal youths in the original sampling frame (the TDS2 population) by the number of completed interviews, separately for each stratum, sex and birth month. These weights take into account the original stratification of the sample as well as variation in response rates across strata so far as it depends on the stratum, sex, and birth month. Thus, the weights scale the final youth sample up to the total number of focal youths in the sampling frame. As explained in Section 3, comparing the YIF youth sample with Australian Census data suggests that the sampling frame captures about 98 per cent of youths born in the period (see Breunig et al., 2007).

#### Timing issues

Figure 1 provides an overview of some of the YIF timing issues. The period during which the YIF cohort have their birthdays are indicated (1 October–31 March) as well as the period during which the Wave 1 and Wave 2 interviews were carried out (15 August 2006– 21 November 2006 and 28 August 2008–6 April 2009). Note that some respondents have turned 19 at the time of their Wave 1 interview. At the Wave 2 interview, some are 20 and some 21.

The information about study and employment status collected in the surveys refer to the time of the interview, while the income information refer to the last financial year.<sup>19</sup>

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 $<sup>^{19}\</sup>mathrm{Transfers}$  from parents refer to the previous 12 months.

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Main tables and figures

Number of years	Year first observed receiving income support					
observed receiving	1991 - 1993	1994 - 1998	$1999 – 2005^{\dagger}$			
income support	(3  years)	(5  years)	(7  years)			
	$3-5^{\#}$	6-10#	$11 - 17^{\#}$			
Six or more		В				
		Y: 1472				
		P: 1413				
		M: 785				
Three or more, but		F				
less than six		Y: 231				
	Ε	P: 212	С			
	Y: 403	M: 135	Y: 526			
Less than three	P: 384	D	P: 491			
	M: 233	Y: 420	M: 302			
		P: 419				
		M: 271				
None		А				
		Y: 1027				
	P: 1045					
		M: 704				

Table 1: Stratification scheme and sample sizes

Legend: Letters ABCDEF indicate the Youth in Focus stratum label. Letters YPM indicate the youth sample, the parent sample and the matched sample. *Notes:* <sup>†</sup>The date of the administrative files is 8 April 2005. <sup>#</sup>Age of person born 1 January 1988. Source: Wave 1 of the Youth in Focus Survey.



Legend: fin. year: financial year. Notes: Source: Youth in Focus Project.

Figure 1: Youth in Focus timing information

Г	able 2a: A	ctivity by	v sex			
Wave 1						
	Emp	Emp	Unemp	Not in	Total	
	full	part		labour		
	time	$time^a$		force		
Males (per cent distribution	)					
In school	0.4	4.4	1.7	3.0	9.4	
Studying full time	15.9	19.4	4.7	6.1	46.1	
Studying part time	7.1	1.7	0.5	0.4	9.8	
Not studying or deferred	16.0	11.0	5.9	1.8	34.7	
Total	39.3	36.6	12.8	11.3	100.0	
Females (per cent distributi	on)					
In school	0.2	3.8	1.2	2.2	7.4	
Studying full time	5.5	31.5	5.7	5.8	48.5	
Studying part time	3.6	3.2	0.7	0.5	8.0	
Not studying or deferred	12.7	14.0	5.4	3.9	36.1	
Total	22.0	52.6	13.1	12.4	100.0	

Legend: Emp: employed; Unemp: unemployed. Notes: Weighted estimates. 178 observations omitted due to missing financial assistance data, corresponding to 5194.4 weighted people (3.1-5.7% across strata). The sample size is only 10 for young people in school working full time, only 19 for part-time students not in the labour force, and only 31 for unemployed part-time students. <sup>a</sup>Includes 21 respondents with unknown hours. Source: Wave 1 of the Youth in Focus Survey data.

Table 2b: Activity by sex					
	Wa	ave 2			
	$\operatorname{Emp}$	$\operatorname{Emp}$	Unemp	Not in	Total
	full	part		labour	
	time	$time^a$		force	
Males (per cent distribution	.)				
Studying full time <sup><math>g</math></sup>	13.6	22.4	4.0	6.6	46.5
Studying part time	9.0	2.1	0.8	0.9	12.9
Not studying or deferred	24.1	9.3	5.1	2.1	40.6
Total	46.7	33.8	10.0	9.6	100.0
Females (per cent distributi	on)				
Studying full time <sup><math>g</math></sup>	4.9	37.2	4.6	5.4	52.1
Studying part time	4.7	3.9	1.0	0.6	10.3
Not studying or deferred	18.8	11.5	3.8	3.6	37.7
Total	28.4	52.6	9.5	9.5	100.0

Legend: Emp: employed; Unemp: unemployed. Notes: Weighted estimates. 79 observations omitted due to missing information about co-residence, financial transfers from parents, study or work status, corresponding to 4126.5 weighted people (2.4–4.2% across strata). The sample size is only 16 for part-time students not in the labour force and only 22 for unemployed part-time students. <sup>a</sup>Includes 7 respondents with unknown hours. <sup>g</sup>Includes 2 respondents in school. Source: Wave 2 of the Youth in Focus Survey data.

wave 1			
	Indepen-	Co-resi-	Total
	dence	dence	
Receiving financial transfers from parents <sup>b</sup>	or others	(per cent dbc)	
No	38.8	29.5	31.2
Yes	61.2	70.5	68.8
Amount received including zeros (dollars)			
Median	500	600	600
90th percentile	9000	7000	7000
Amount received excluding zeros (dollars)			
Median	2000	1500	1500
90th percentile	12409	9000	10000

Table 3a: Financial transfers by co-residence Wave 1

Legend: dbc: distribution by column. Notes: Weighted estimates. 178 observations omitted due to missing financial transfers data, corresponding to 5194.4 weighted people (3.1–5.7% across strata). <sup>b</sup>Includes guardians. Source: Wave 1 of the Youth in Focus Survey data.

wave 2			
	Indepen-	Co-resi-	Total
	dence	dence	
Receiving financial transfers from $parents^b$	or others	(per cent dbc)	
No	54.8	52.2	53.0
Yes	45.2	47.8	47.0
Amount received including zeros (dollars)			
Median	0	0	0
90th percentile	8000	5000	5500
Amount received excluding zeros (dollars)			
Median	2500	1500	2000
90th percentile	15000	10000	10500

Table 3b: Financial transfers by co-residence Wave 2

Legend: dbc: distribution by column. Notes: Weighted estimates. 79 observations omitted due to missing information about co-residence, financial transfers from parents, study or work status, corresponding to 4126.5 weighted people (2.4–4.2% across strata). <sup>b</sup>Includes guardians. Source: Wave 2 of the Youth in Focus Survey data.

	١	vave 1					
Amount received	80	\$1-499	\$500–999	1000 - 1999	2000-4999	\$5000–9999	$10000^{-e}$
What was the purpose of the fin	ancial	transfer	rs (per d	cent, mi	ultiple)		
Real estate purchase	0.0	0.5	1.1	0.4	1.5	1.6	2.8
Car purchase or similar	0.0	14.8	24.6	34.5	49.8	63.8	69.9
Rent while studying	0.0	6.0	8.8	7.5	11.7	15.9	33.1
HECS or other tuition fees	0.0	29.2	36.3	37.7	39.1	44.4	60.0
Utility or credit card bills	0.0	38.8	39.8	42.4	42.4	43.2	57.9
Fines	0.0	10.0	11.5	14.1	10.5	14.2	17.8
General living expenses	0.0	38.0	45.2	51.1	40.4	41.7	55.6
Other debt payments	0.0	4.7	6.8	7.0	5.3	6.5	7.9
Other	0.0	0.7	1.3	0.4	1.3	0.5	1.6
How much are you expected to p	pay bac	ek? (per	cent di	stributio	on by co	lumn)	
None	0.0	69.2	70.7	68.9	60.7	59.9	61.3
A small portion	0.0	1.7	5.2	3.6	6.3	6.2	12.4
About half	0.0	3.0	3.4	5.3	5.9	5.6	7.3
Most	0.0	2.5	1.6	5.0	4.1	6.9	7.4
All	0.0	21.6	17.2	14.7	20.2	19.8	8.8
All plus interest	0.0	0.5	0.2	1.3	1.2	0.6	0.7
Can't say	0.0	1.6	1.9	1.2	1.6	1.1	2.1
Are you living in someone's inv	estmen	nt proper	rty for l	ow rent	? (per d	cent)	

Table 4a: Characteristics of financial transfers by amount received

-

Yes  $na^h$  7.6 7.2 4.3 4.7 6.2 7.3 Notes: Weighted estimates. 178 observations omitted due to missing financial transfers data,

corresponding to 5194.4 weighted people (3.1–5.7% across strata). <sup>e</sup>Within category, the 50th and 90th percentiles are 13500\$ and 25967\$. <sup>h</sup>Question not asked if not receiving a transfer. Source: Wave 1 of the Youth in Focus Survey data.

	```	vave z					
Amount received	\$0	\$1-499	\$500–999	1000 - 1999	2000-4999	\$5000–9999	$10000^{-e}$
What was the purpose of the fit	nancial	assistar	nce (per	cent, n	ultiple)		
Real estate purchase	0.0	0.0	2.7	0.0	0.8	3.5	8.7
Car purchase or similar	0.0	18.6	21.3	22.9	31.3	28.4	51.8
Rent while studying	0.0	5.8	10.4	10.4	16.9	26.5	37.0
HECS or other tuition fees	0.0	14.2	20.2	30.8	30.5	39.8	44.9
Utility or credit card bills	0.0	52.5	51.3	39.4	44.6	43.0	46.7
Fines	0.0	13.4	9.7	16.6	13.9	10.7	12.3
General living expenses	0.0	25.3	24.5	40.0	38.9	32.7	40.4
Other debt payments	0.0	4.1	4.0	3.3	8.5	4.9	6.5
Other	0.0	1.6	0.5	1.8	0.6	3.5	2.4
How much are you expected to	pay bac	k? (per	cent di	stributio	on by co	lumn)	
None	0.0	72.6	66.3	68.1	73.5	61.4	66.7
A small portion	0.0	2.2	0.0	2.7	2.7	2.7	2.7
About half	0.0	2.0	4.8	3.3	2.7	2.7	6.1
Most	0.0	1.5	2.5	6.7	4.2	8.0	7.2
All	0.0	20.3	24.5	18.3	13.8	18.8	10.0
All plus interest	0.0	0.0	0.6	0.9	0.7	3.6	3.7
Can't say	0.0	1.4	1.4	0.0	2.4	2.7	3.6
Are you living in someone's in	vestmen	nt proper	rty for l	ow rent	? (per a	cent)	
Yes	$\mathrm{na}^h$	4.3	7.2	2.5	6.8	18.4	6.9

Table 4b: Characteristics of financial transfers by amount received Wave 2

*Notes:* Weighted estimates. 79 observations omitted due to missing information about coresidence, financial transfers from parents, study or work status, corresponding to 4126.5 weighted people (2.4–4.2% across strata). <sup>e</sup>Within category, the 50th and 90th percentiles are 14300\$ and 40000\$. <sup>h</sup>Question not asked if not receiving a transfer. Source: Wave 2 of the Youth in Focus Survey data.

Wave 1						
	Emp	Emp	Unemp	Not in	Total	
	full	part		labour		
	time	$time^a$		force		
Proportion co-residing with p	arents <sup>b</sup> (j	per cent)				
In school	51.5	95.0	93.6	93.1	92.7	
Studying full time	82.9	85.9	76.3	72.3	82.4	
Studying part time	83.0	87.7	73.6	69.2	83.0	
Not studying or deferred	80.1	83.7	74.0	61.9	78.9	
Total	81.3	86.2	77.1	74.3	82.1	
Proportion receiving financial	l transfer	rs from par	rents <sup>b</sup> or o	thers (per	cent)	
In school	77.3	73.8	79.8	76.5	75.8	
Studying full time	59.0	80.4	83.7	78.8	75.6	
Studying part time	53.9	72.7	62.7	48.7	59.3	
Not studying or deferred	59.7	66.1	55.0	49.1	60.4	
Total	58.6	75.3	69.7	70.0	68.8	
Median amount received inclu	uding zero	os (dollars	;)			
In school	1000	800	600	1000	800	
Studying full time	400	1159	1159	1159	1000	
Studying part time	200	600	500	0	350	
Not studying or deferred	350	520	150	0	300	
Total	300	1000	500	600	600	
90th percentile of amount rec	eived inc	luding zero	os (dollars	)		
In school	3400	5000	6208	5000	5000	
Studying full time	6000	10000	10000	8000	10000	
Studying part time	5000	6208	6000	5000	5000	
Not studying or deferred	5000	6000	3000	2300	5000	
Total	5000	10000	6208	6000	7000	
Median percentile of amount	received	excluding	zeros (doli	lars)		
In school	2500	1500	900	1500	1500	
Studying full time	2000	2000	2000	2000	2000	
Studying part time	1500	1500	1500	3000	1500	
Not studying or deferred	1260	1500	592	800	1159	
Total	1500	2000	1040	1500	1500	

Table 5a: Co-residence and financial transfers by activity

Legend: Emp: employed; Unemp: unemployed. Notes: Weighted estimates. 178 observations omitted due to missing financial transfers data, corresponding to 5194.4 weighted people (3.1–5.7% across strata). The sample size is only 10 for young people in school working full time, only 19 for part-time students not in the labour force, and only 31 for unemployed part-time students. <sup>a</sup>Includes 21 respondents with unknown hours. <sup>b</sup>Includes guardians. Source: Wave 1 of the Youth in Focus Survey data.

wave 2							
	Emp	Emp	Unemp	Not in	Total		
	full	part		labour			
	time	$time^a$		force			
Proportion co-residing with	parents <sup>b</sup> (j	per cent)					
Studying full time <sup><math>g</math></sup>	68.0	76.3	67.9	58.0	71.8		
Studying part time	71.5	82.9	68.7	69.8	74.1		
Not studying or deferred	62.5	73.1	60.5	54.1	64.5		
Total	65.5	76.0	64.6	57.8	69.2		
Proportion receiving financia	al transfer	s from par	rents <sup>b</sup> or o	thers (per	cent)		
Studying full time <sup><math>g</math></sup>	35.1	59.9	75.0	60.7	56.7		
Studying part time	28.7	36.2	64.6	59.6	35.6		
Not studying or deferred	33.6	43.4	46.8	41.3	38.3		
Total	33.1	54.3	61.0	54.9	47.0		
Median amount received inc	luding zero	os (dollars	s)				
Studying full time <sup><math>g</math></sup>	0	500	800	583	400		
Studying part time	0	0	263	400	0		
Not studying or deferred	0	0	0	0	0		
Total	0	300	300	263	0		
90th percentile of amount re	ceived inc	luding zero	os (dollars	;)			
Studying full time <sup><math>g</math></sup>	5000	10000	16000	8000	9000		
Studying part time	3000	3000	2500	3000	3000		
Not studying or deferred	4000	3000	3500	5000	3500		
Total	4000	7200	8000	6123	5500		
Median percentile of amount	t received	excluding	zeros (dol	lars)			
Studying full time <sup><math>g</math></sup>	1153	2000	2000	2500	2000		
Studying part time	2000	1700	600	1153	1560		
Not studying or deferred	1500	1700	1000	500	1500		
Total	1500	2000	1200	2000	2000		

Table 5b: Co-residence and financial transfers by activity  $W_{1} = 2$ 

Legend: Emp: employed; Unemp: unemployed. Notes: Weighted estimates. 79 observations omitted due to missing information about co-residence, financial transfers from parents, study or work status, corresponding to 4126.5 weighted people (2.4–4.2% across strata). The sample size is only 16 for part-time students not in the labour force and only 22 for unemployed part-time students. <sup>a</sup>Includes 7 respondents with unknown hours. <sup>b</sup>Includes guardians. <sup>g</sup>Includes 2 respondents in school. Source: Wave 2 of the Youth in Focus Survey data.

Wave 1						
Family group	Ν	М	Ι	Total		
Study status (per cent distribution by	ı column)					
In school	8.5	9.4	7.3	8.4		
Studying full time	55.8	46.3	35.6	47.3		
Studying part time	8.5	9.3	9.2	8.9		
Not studying or deferred	27.3	35.1	47.9	35.4		
Employment status (per cent distribu	tion by col	umn)				
Employed full time	28.9	33.8	30.7	30.9		
Employed part time <sup><math>a</math></sup>	52.3	42.4	34.6	44.4		
Unemployed	9.4	11.5	19.8	12.9		
Not in the labour force	9.5	12.3	14.8	11.8		

Table 6a: Activity by family group

Legend: N, M, I: the number of years the youth's family received income support (N=none, M=less than six, I=more than six). Notes: Weighted estimates. 178 observations omitted due to missing financial transfers data, corresponding to 5194.4 weighted people (3.1–5.7% across strata). <sup>a</sup>Includes 21 respondents with unknown hours. Source: Wave 1 of the Youth in Focus Survey data.

Wave 2							
Family group	Ν	М	Ι	Total			
Study status (per cent distribution by column)							
Studying full $time^g$	56.8	45.5	42.2	49.2			
Studying part time	12.0	11.1	11.6	11.6			
Not studying or deferred	31.2	43.4	46.2	39.2			
Employment status (per cent distribution	on by col	umn)					
Employed full time	34.0	42.5	37.8	37.7			
Employed part time <sup><math>a</math></sup>	50.2	39.9	35.6	43.0			
Unemployed	6.4	10.3	14.1	9.7			
Not in the labour force	9.4	7.3	12.5	9.6			

#### Table 6b: Activity by family group Wave 2

Legend: N, M, I: the number of years the youth's family received income support (N=none, M=less than six, I=more than six). Notes: Weighted estimates. 79 observations omitted due to missing information about co-residence, financial transfers from parents, study or work status, corresponding to 4126.5 weighted people (2.4–4.2% across strata). <sup>a</sup>Includes 7 respondents with unknown hours. <sup>g</sup>Includes 2 respondents in school. Source: Wave 2 of the Youth in Focus Survey data.

Wave 1					
Family group	Ν	Μ	Ι	Total	
Co-residing with parents <sup>b</sup> (per cent $dbc$ )					
No	13.3	17.8	25.0	17.9	
Yes	86.7	82.2	75.0	82.1	
Receiving financial transfers from paren	$ts^b$ or othe	ers (per ce	ent dbc)		
No	21.1	32.2	45.3	31.2	
Yes	78.9	67.8	54.7	68.8	
Co-residence and financial transfers (pe	er cent dbc	)			
Independent, no financial transfers	2.1	6.5	14.8	7.0	
Co-residing, no financial transfers	19.0	25.8	30.5	24.3	
Independent and receiving transfers	11.2	11.3	10.2	11.0	
Co-residing and receiving transfers	67.7	56.4	44.6	57.9	
Amount received including zeros (dollar	(s)				
Median	1159	500	200	600	
90th percentile	10000	6208	4000	7000	
Amount received excluding zeros (dollar	rs)				
Median	2000	1500	1000	1500	
90th percentile	10000	9800	6208	10000	

Table 7a: Co-residence and financial transfers by family group

If received transfers,<sup>h</sup> are you living in someone's investment

property for low rent? (per cent)				
Yes	5.7	4.6	8.8	6.0

Legend: N, M, I: the number of years the youth's family received income support (N=none, M=less than six, I=more than six); dbc: distribution by column. Notes: Weighted estimates. 178 observations omitted due to missing financial transfers data, corresponding to 5194.4 weighted people (3.1–5.7% across strata). <sup>b</sup>Includes guardians. <sup>h</sup>Question not asked if not receiving a transfer. Source: Wave 1 of the Youth in Focus Survey data.

Wave 2								
Family group	Ν	М	Ι	Total				
Co-residing with parents <sup>b</sup> (per cent $dbc$ )	)							
No	26.0	31.5	37.3	30.8				
Yes	74.0	68.5	62.7	69.2				
Receiving financial transfers from parent	Receiving financial transfers from $parents^b$ or others (per cent $dbc$ )							
No	43.7	55.3	64.3	53.0				
Yes	56.3	44.7	35.7	47.0				
Co-residence and financial transfers (per cent dbc)								
Independent, no financial transfers	10.8	17.0	25.8	16.9				
Co-residing, no financial transfers	32.9	38.4	38.4	36.1				
Independent and receiving transfers	15.2	14.5	11.4	13.9				
Co-residing and receiving transfers	41.1	30.2	24.3	33.1				
Amount received including zeros (dollar	rs)							
Median	300	0	0	0				
90th percentile	10000	4000	3000	5500				
Amount received excluding zeros (dolla	rs)							
Median	2600	1500	1000	2000				
90th percentile	13000	10000	8000	10500				
The state of the state s	,	. ,	,					

Table 7b: Co-residence and financial transfers by family group

If received transfers,<sup>h</sup> are you living in someone's investment

property for low rent? (per cent)				
Yes	6.8	6.9	9.0	7.3

Legend: N, M, I: the number of years the youth's family received income support (N=none, M=less than six, I=more than six); dbc: distribution by column. Notes: Weighted estimates. 79 observations omitted due to missing information about co-residence, financial transfers from parents, study or work status, corresponding to 4126.5 weighted people (2.4–4.2% across strata). <sup>b</sup>Includes guardians. <sup>h</sup>Question not asked if not receiving a transfer. Source: Wave 2 of the Youth in Focus Survey data.

Family group	Ν	М	Ι	Total
If received transfers, what was the purpose	(per cent,	multiple)		
Purchasing real estate	1.0	0.9	2.0	1.2
Purchasing a car or similar	43.8	40.5	37.0	41.3
Paying accommodation while studying	14.5	11.1	9.8	12.4
Paying HECS or other tuition fees	44.4	37.4	33.0	39.7
Paying utility or credit card bills	46.0	39.8	41.5	43.1
Paying fines	11.5	12.3	15.3	12.6
Paying general living expenses	47.0	41.6	42.9	44.4
Paying off other debt	4.9	7.7	6.9	6.2
Other	1.1	0.9	0.7	0.9
If received transfers, how much are you exp	pected to p	ay back? (	per cent d	bc)
None	64.2	64.9	67.4	65.1
A small portion	6.4	4.6	4.7	5.5
About half	5.2	5.6	3.7	5.0
Most	4.5	4.8	3.4	4.4
All	17.8	17.3	18.1	17.7
All plus interest	0.5	1.1	0.9	0.8
Can't say	1.4	1.6	1.7	1.5

Table 8a: Characteristics of financial transfers by family background Wave 1

Legend: N, M, I: the number of years the youth's family received income support (N=none, M=less than six, I=more than six); dbc: distribution by column. *Notes:* Weighted estimates. 178 observations omitted due to missing financial transfers data, corresponding to 5194.4 weighted people (3.1-5.7% across strata). Source: Wave 1 of the Youth in Focus Survey data.

Family group	Ν	М	Ι	Total
If received transfers, what was the purpose	(per cent,	multiple)		
Purchasing real estate	2.2	2.9	1.4	2.3
Purchasing a car or similar	28.9	29.5	27.4	28.8
Paying accommodation while studying	20.4	14.4	13.3	17.1
Paying HECS or other tuition fees	37.0	22.1	23.1	29.7
Paying utility or credit card bills	45.1	43.4	52.0	46.0
Paying fines	11.5	12.0	17.9	13.0
Paying general living expenses	36.4	30.2	34.2	34.1
Paying off other debt	3.7	6.6	7.9	5.4
Other	0.7	3.1	1.7	1.6
If received transfers, how much are you exp	pected to p	ay back? (	per cent d	bc)
None	70.9	67.8	64.8	68.7
A small portion	1.9	2.1	3.1	2.2
About half	2.8	3.6	4.8	3.5
Most	4.9	4.6	5.4	4.9
All	15.5	18.5	20.2	17.4
All plus interest	1.4	2.3	0.3	1.4
Can't say	2.5	1.2	1.4	1.9

Table 8b: Characteristics of financial transfers by family background Wave 2

Legend: N, M, I: the number of years the youth's family received income support (N=none, M=less than six, I=more than six); dbc: distribution by column. Notes: Weighted estimates. 79 observations omitted due to missing information about co-residence, financial transfers from parents, study or work status, corresponding to 4126.5 weighted people (2.4–4.2% across strata). Source: Wave 2 of the Youth in Focus Survey data.

Wave 1						
Family group	Ν	М	Ι	Total		
Living	independen	tly				
Receiving financial transfers (per co	ent distribut	tion by col	umn)			
No	15.9	36.4	59.3	38.8		
Yes	84.1	63.6	40.7	61.2		
Amount received including zeros (d	ollars)					
Median	2000	500	0	500		
90th percentile	12600	9000	3000	9000		
Amount received excluding zeros (d	ollars)					
Median	3000	1200	1000	2000		
90th percentile	15000	12409	6000	12409		
If receiving, how much financial transfers did you receive? (per cent dbc)						
1-499	9.3	19.7	28.1	17.4		
\$500–999	13.2	17.7	20.9	16.6		
1000-1999	15.3	15.5	17.2	15.9		
2000-4999	18.0	20.7	15.5	18.2		
5000-9999	22.4	11.7	14.3	16.9		
$10000^{-e}$	21.8	14.7	4.1	15.0		
Co-residi	ing with par	$ents^b$				
Receiving financial transfers (per co	ent distribut	tion by col	umn)			
No	21.9	31.4	40.6	29.5		
Yes	78.1	68.7	59.4	70.5		
Amount received including zeros (d	ollars)					
Median	1159	500	300	600		
90th percentile	8900	6000	4000	7000		
Amount received excluding zeros (d	ollars)					
Median	2000	1500	1000	1500		
90th percentile	10000	8000	6208	9000		
If receiving, how much financial tra	unsfers did g	you receive	e? (per cen	t  dbc)		
1-499	13.6	19.4	22.6	17.3		
\$500-999	13.5	16.1	18.9	15.4		
\$1000-1999	17.5	17.4	20.5	18.1		
\$2000-4999	25.3	25.8	22.0	24.8		
\$5000-9999	17.7	12.3	10.6	14.6		
$10000^{-e}$	12.4	9.0	5.5	9.9		

Table 9a: Financial transfers by co-residence and family group

Legend: N, M, I: the number of years the youth's family received income support (N=none, M=less than six, I=more than six); dbc: distribution by column. Notes: Weighted estimates. 178 observations omitted due to missing financial transfers data, corresponding to 5194.4 weighted people (3.1–5.7% across strata).  $^{b}$ Includes guardians.  $^{e}$ Within category, the 50th and 90th percentiles are 13500\$ and 25967\$. Source: Wave 1 of the Youth in Focus Survey data.

Wave 2						
Family group	Ν	М	Ι	Total		
Living	ı independen	tly				
Receiving financial transfers (per o	cent distribut	tion by col	lumn)			
No	41.5	54.0	69.3	54.8		
Yes	58.5	46.0	30.7	45.2		
Amount received including zeros (a	dollars)					
Median	700	0	0	0		
90th percentile	12000	6000	3000	8000		
Amount received excluding zeros (	dollars)					
Median	4000	2000	1000	2500		
90th percentile	16000	13000	10000	15000		
If receiving, how much financial assistance did you receive? (per cent dbc)						
\$1-499	7.9	19.5	17.4	13.8		
\$500–999	7.9	15.2	22.1	13.5		
1000-1999	11.4	14.9	15.8	13.5		
2000-4999	27.5	20.3	18.9	23.2		
\$5000–9999	18.0	15.6	10.4	15.5		
$10000^{-e}$	27.3	14.5	15.4	20.4		
Co-resid	ing with par	$ents^b$				
Receiving financial transfers (per o	cent distribut	tion by col	lumn)			
No	44.4	56.0	61.3	52.2		
Yes	55.6	44.0	38.7	47.8		
Amount received including zeros (d	dollars)					
Median	263	0	0	0		
90th percentile	7500	3000	3000	5000		
Amount received excluding zeros (	dollars)					
Median	2000	1153	1153	1500		
90th percentile	10500	8000	6100	10000		
If receiving, how much financial as	ssistance did	you recei	ve? (per ce	nt dbc)		
1-499	17.0	14.3	20.5	16.9		
500-999	13.6	20.1	14.1	15.5		
1000-1999	15.0	22.9	24.7	19.2		
\$2000-4999	23.1	26.7	23.7	24.2		
\$5000-9999	16.9	7.3	11.2	13.0		
$10000^{-e}$	14.5	8.8	6.0	11.1		

Table 9b: Financial transfers by co-residence and family group

Legend: N, M, I: the number of years the youth's family received income support (N=none, M=less than six, I=more than six); dbc: distribution by column. Notes: Weighted estimates. 79 observations omitted due to missing information about co-residence, financial transfers from parents, study or work status, corresponding to 4126.5 weighted people (2.4–4.2% across strata). <sup>b</sup>Includes guardians. <sup>e</sup>Within category, the 50th and 90th percentiles are 14300\$ and 40000\$. Source: Wave 2 of the Youth in Focus Survey data.

	wave 1					
	Model 1	Model 2	Model 3	Model 4		
Family history of income support receipt (base: stratum A)						
Moderate (strata $C+D+E+F$ )	-0.034	-0.036	$-0.045^{**}$	-0.035		
	0.021	0.022	0.023	0.022		
Intensive (stratum B)	$-0.053^{**}$	-0.043	$-0.054^{*}$	-0.044		
	0.026	0.029	0.031	0.030		
Parents' income previous finance	ial year					
Parental income $(\log)^a$	Ū.	0.016**	0.018**	$0.016^{*}$		
		0.008	0.009	0.008		
Parental support						
Parental transfer (1000 dollars)			$-0.004^{**}$	$-0.004^{**}$		
			0.001	0.001		
Youth study activity (base: not s	studying)					
In school	0 5/			$0.135^{**}$		
				0.017		
Studying full time				-0.007		
				0.019		
Studying part time				0.002		
				0.032		
Youth work activity (base: not in	n the labour fo	orce)				
Working full time	e une tace ar je			0.111**		
				0.023		
Working part time <sup><math>b</math></sup>				0.142**		
				0.026		
Unemployed				0.060**		
- ·				0.025		

Table 10a: Co-residence (marginal effects at the mean based on probit model)

*Notes:* The regressions include additional variables, see Table 14a. <sup>*a*</sup>Lower bound on parental family income for previous financial year (2005–2006), excluding government payments. <sup>*b*</sup>Part-time employment includes respondents who work unknown hours. \*Statistically significant at 10%. \*\*Statistically significant at 5%.

	Wave 2			
	Model 1	Model 2	Model 3	Model 4
Family history of income support	receipt (base	: stratum A	)	
Moderate (strata $C+D+E+F$ )	-0.046	-0.048	-0.070**	$-0.065^{*}$
	0.032	0.033	0.034	0.034
Intensive (stratum B)	-0.039	-0.028	-0.059	-0.060
	0.039	0.044	0.046	0.047
Parents' income 2005–2006 finance	cial year			
Parental income $(\log)^a$	Ū	0.018	0.013	0.007
		0.014	0.015	0.015
Parental support				
Parental transfer (1000 dollars)			$-0.012^{**}$	$-0.012^{**}$
×			0.003	0.003
Youth study activity (base: not stu	uduina)			
Studying full time <sup><math>g</math></sup>	<i>J J J J</i>			0.029
				0.033
Studying part time				0.094**
				0.042
Youth work activity (base: not in	the labour fo	orce)		
Working full time	une tabear je			0.120**
				0.048
Working part time <sup><math>b</math></sup>				0.185**
				0.046
Unemployed				0.039
÷ •				0.060

Table 10b: Co-residence (marginal effects at the mean based on probit model) Wave 2

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*Notes:* The regressions include additional variables, see Table 14b. <sup>*a*</sup>Lower bound on parental family income for 2005–2006 financial year, excluding government payments. <sup>*b*</sup>Includes respondents who work unknown hours. <sup>*g*</sup>Includes respondents in school. \*Statistically significant at 10%. \*\*Statistically significant at 5%.

	wave 1			
	Model 1	Model 2	Model 3	Model 4
Family history of income support	receipt (base	: stratum A)		
Moderate (strata $C+D+E+F$ )	$-1252^{**}$	-1200**	$-1237^{**}$	$-1191^{**}$
× · · · · · · · · · · · · · · · · · · ·	370	399	399	398
Intensive (stratum B)	$-2390^{**}$	$-1915^{**}$	$-1961^{**}$	$-1877^{**}$
	452	534	534	534
Parents' income previous financia	ıl year			
Parental income $(\log)^a$	U U	446**	457**	429**
		176	176	175
Parental sunnort				
Co-residing with parents			-966**	-987**
co restante tron parentes			440	443
V				
Four study activity (base: not st	uaying)			709
III SCHOOL				192 676
Studying full time				1380**
Studying fun time				377
Studying part time				-655
				648
Vouth work activity (base, not in	the labour f	27700)		
Working full time		nce)		97
working full time				21 604
Working part time <sup><math>b</math></sup>				676
for the sume				550
Unemployed				489
T				675

Table 11a: Parental transfer (\$/year) (marginal effects at the mean based on tobit model) Wave 1

*Notes:* The regressions include additional variables, see Table 15a. <sup>*a*</sup>Lower bound on parental family income for previous financial year (2005–2006), excluding government payments. <sup>*b*</sup>Part-time employment includes respondents who work unknown hours. \*Statistically significant at 10%. \*\*Statistically significant at 5%.

	wave z			
	Model 1	Model 2	Model 3	Model 4
Family history of income support	receipt (base	e: stratum A)		
Moderate (strata $C+D+E+F$ )	$-1444^{*}$	$-1712^{**}$	$-1881^{**}$	$-1920^{**}$
	786	746	739	737
Intensive (stratum B)	$-2590^{**}$	$-2918^{**}$	$-3026^{**}$	$-3145^{**}$
	1004	1032	1021	1015
Parents' income 2005–2006 finan	icial year			
Parental income $(\log)^a$	Ŭ	-194	-154	-203
		340	337	337
Parental support				
Co-residing with parents			$-2984^{**}$	$-2719^{**}$
0			677	678
Youth study activity (base: not st	tuduina)			
Studying full time <sup><math>g</math></sup>	adging)			2368**
				740
Studying part time				-970
				1113
Vouth work activity (base not in	the labour fo	orce)		
Working full time	, inc idoodi je	nec)		-3378**
working full time				1161
Working part time <sup><math>b</math></sup>				-1508
				1082
Unemployed				1747
1 0				1395

Table 11b: Parental transfer (\$/year) (marginal effects at the mean based on tobit model) Wave 2

*Notes:* The regressions include additional variables, see Table 15b. <sup>*a*</sup>Lower bound on parental family income for 2005–2006 financial year, excluding government payments. <sup>*b*</sup>Includes respondents who work unknown hours. <sup>*g*</sup>Includes respondents in school. \*Statistically significant at 10%. \*\*Statistically significant at 5%.

	wave 1			
	In	Stud	Stud	Not
	school	full	part	stud
		time	time	
Family history of income support	receipt (base	: stratum A	1)	
Moderate (strata $C+D+E+F$ )	0.003	-0.006	-0.010	0.012
	0.006	0.031	0.014	0.031
Intensive (stratum B)	0.002	-0.054	0.007	0.045
	0.008	0.041	0.018	0.040
Parents' income previous financia	l year			
Parental income $(\log)^a$	0.002	0.009	-0.001	-0.010
	0.003	0.013	0.006	0.012
Parental support				
Co-residing with parents	0.031**	-0.030	-0.002	0.001
	0.007	0.034	0.015	0.032
Parental transfer (1000 dollars)	-0.000	0.010**	$-0.003^{*}$	$-0.006^{**}$
	0.001	0.003	0.002	0.003
Youth work activity (base: not in	the labour fo	orce)		
Working full time	$-0.080^{**}$	$-0.222^{**}$	$0.103^{**}$	0.199**
	0.011	0.045	0.035	0.048
Working part time <sup><math>b</math></sup>	$-0.026^{**}$	0.006	-0.019	0.039
	0.008	0.045	0.023	0.045
Unemployed	$-0.012^{**}$	$-0.131^{**}$	-0.020	$0.163^{**}$
	0.006	0.055	0.023	0.057

Table 12a: Youth study activity (marginal effects at the mean based on MNL model) Wave 1

*Legend:* MNL: multinomial logit; Stud: studying. *Notes:* The regressions include additional variables, see Table 16a. <sup>*a*</sup>Lower bound on parental family income for previous financial year (2005–2006), excluding government payments. <sup>*b*</sup>Part-time employment includes respondents who work unknown hours. \*Statistically significant at 10%. \*\*Statistically significant at 5%.

	Stud	Stud	Not					
	full	part	stud					
	time	time						
Family history of income support receipt (base: stratum A)								
Moderate (strata $C+D+E+F$ )	0.015	-0.026	0.011					
	0.040	0.021	0.038					
Intensive (stratum B)	0.032	-0.008	-0.024					
	0.054	0.028	0.050					
Parents' income 2005–2006 financial year								
Parental income $(\log)^a$	$0.045^{**}$	-0.002	$-0.043^{**}$					
	0.019	0.010	0.017					
Parental support								
Co-residing with parents	0.004	$0.032^{*}$	-0.036					
	0.037	0.019	0.035					
Parental transfer (1000 dollars)	0.010**	-0.004	$-0.006^{*}$					
	0.003	0.003	0.003					
Youth work activity (base: not in the labour force)								
Working full time	$-0.430^{**}$	0.103**	$0.327^{**}$					
	0.048	0.043	0.057					
Working part time <sup><math>b</math></sup>	0.045	-0.017	-0.028					
	0.059	0.038	0.060					
Unemployed	$-0.192^{**}$	-0.039	0.231**					
-	0.067	0.040	0.074					

Table 12b: Youth study activity (marginal effects at the mean based on MNL model) Wave 2

*Legend:* MNL: multinomial logit; Stud: studying. *Notes:* The regressions include additional variables, see Table 16b. <sup>*a*</sup>Lower bound on parental family income for 2005–2006 financial year, excluding government payments. <sup>*b*</sup>Includes respondents who work unknown hours. \*Statistically significant at 10%. \*\*Statistically significant at 5%.

	wave 1					
	Emp	Emp	Unemp	Not in		
	full	part		labour		
	time	$time^a$		force		
Family history of income support receipt (base: stratum A)						
Moderate (strata $C+D+E+F$ )	-0.007	$-0.059^{*}$	0.022	$0.044^{**}$		
	0.027	0.031	0.022	0.020		
Intensive (stratum B)	-0.054	$-0.088^{**}$	0.091**	$0.050^{*}$		
	0.033	0.040	0.033	0.028		
Parents' income previous financial year						
Parental income $(\log)^a$	0.011	0.001	-0.007	-0.005		
	0.012	0.013	0.008	0.007		
Parental support						
Co-residing with parents	0.033	$0.135^{**}$	$-0.042^{*}$	$-0.126^{**}$		
	0.027	0.033	0.024	0.027		
Parental transfer (1000 dollars)	0.000	$0.004^{*}$	-0.002	-0.003		
``````````````````````````````````````	0.002	0.002	0.002	0.002		
Youth study activity (base: not studying)						
In school	$-0.320^{**}$	0.083	0.039	$0.198^{**}$		
	0.015	0.051	0.032	0.048		
Studying full time	$-0.160^{**}$	0.151**	$-0.033^{*}$	0.042**		
* C	0.023	0.028	0.018	0.018		
Studying part time	0.248**	$-0.177^{**}$	$-0.072^{**}$	0.001		
	0.049	0.050	0.021	0.034		
				•		

Table 13a: Youth work activity (marginal effects at the mean based on MNL model) Wave 1

Legend: MNL: multinomial logit; Emp: employed; Unemp: unemployed. Notes: The regressions include additional variables, see Table 17a. <sup>a</sup>Lower bound on parental family income for previous financial year (2005–2006), excluding government payments. <sup>b</sup>Part-time employment includes respondents who work unknown hours. \*Statistically significant at 10%. \*\*Statistically significant at 5%.

wave 2			
Emp	Emp	Unemp	Not in
full	part		labour
time	$time^a$		force
receipt (base	: stratum A	1)	
0.043	-0.061	$0.055^{**}$	$-0.037^{*}$
0.040	0.039	0.024	0.019
0.008	-0.043	0.050	-0.015
0.053	0.053	0.036	0.024
ial year			
0.016	0.004	0.004	$-0.024^{**}$
0.018	0.018	0.009	0.007
-0.015	$0.115^{**}$	$-0.041^{**}$	$-0.060^{**}$
0.036	0.035	0.020	0.021
-0.002	-0.002	$0.002^{*}$	0.002
0.003	0.004	0.001	0.001
udying)			
$-0.407^{**}$	$0.367^{**}$	-0.017	$0.057^{**}$
0.030	0.031	0.016	0.018
0.069	-0.016	$-0.058^{**}$	0.005
0.054	0.059	0.019	0.036
	$\begin{array}{c} \text{Emp} \\ \text{full} \\ \text{time} \\ \hline \\ receipt (base \\ 0.043 \\ 0.040 \\ 0.008 \\ 0.053 \\ \hline \\ 0.053 \\ \hline \\ ial year \\ 0.016 \\ 0.018 \\ \hline \\ -0.015 \\ 0.016 \\ 0.018 \\ \hline \\ -0.015 \\ 0.036 \\ \hline \\ -0.002 \\ 0.003 \\ \hline \\ dying) \\ -0.407^{**} \\ 0.030 \\ 0.069 \\ 0.054 \end{array}$	Emp         Emp           full         part           time         time <sup>a</sup> receipt (base: stratum A           0.043 $-0.061$ 0.040         0.039           0.008 $-0.043$ 0.053         0.053           ial year         0.016         0.004           0.016         0.004           0.017         0.115**           0.036         0.035 $-0.002$ $-0.002$ $0.003$ $0.004$ $0.036$ $0.035$ $-0.002$ $-0.002$ $0.036$ $0.035$ $-0.003$ $0.004$ $0.030$ $0.031$ $0.069$ $-0.016$ $0.054$ $0.059$	EmpEmpEmpUnempfullparttimetimetimereceipt (base: stratum A) $0.043$ $-0.061$ $0.043$ $-0.061$ $0.040$ $0.039$ $0.040$ $0.039$ $0.040$ $0.039$ $0.040$ $0.039$ $0.040$ $0.039$ $0.053$ $0.053$ $0.053$ $0.053$ $0.053$ $0.053$ $0.016$ $0.004$ $0.016$ $0.004$ $0.016$ $0.004$ $0.018$ $0.018$ $0.002$ $-0.002$ $-0.002$ $-0.002$ $0.003$ $0.004$ $0.003$ $0.004$ $0.003$ $0.031$ $0.016$ $0.030$ $0.054$ $0.059$ $0.019$

Table 13b: Youth work activity (marginal effects at the mean based on MNL model) Wave 2

Legend: MNL: multinomial logit; Emp: employed; Unemp: unemployed. Notes: The regressions include additional variables, see Table 17b. <sup>*a*</sup>Lower bound on parental family income for 2005–2006 financial year, excluding government payments. <sup>*g*</sup>Includes respondents in school. \*Statistically significant at 10%. \*\*Statistically significant at 5%.

## Appendix tables

Table notes *Reference group:* no family history of receipt of income support (stratum A), youth not studying or deferred, youth not working and not looking for work, youth born 1987, youth is female, youth postal address is NSW+ACT, mother is partnered with other natural parent, parent/partner education is year 11 or less. *Notes:* <sup>a</sup>Lower bound on parental family income for the 2005–2006 financial year, excluding government payments. <sup>b</sup>Includes respondents who work unknown hours. <sup>c</sup>Socioeconomic status index based on occupation (highest of mother and partner). <sup>d</sup>Level of education (highest of mother and partner). <sup>e</sup>Either mother or mother's current partner born overseas. <sup>f</sup>Age as of August 2006. <sup>g</sup>Includes respondents in school. \*Statistically significant at 10%. \*\*Statistically significant at 5%. Unweighted data. Source: Wave 1 or 2 (as indicated) of the Youth in Focus Survey data.
	wave 1			
	Model 1	Model 2	Model 3	Model 4
Youth's characteristics				
Born in 1988	$0.055^{**}$	0.051**	0.052**	0.038**
	0.016	0.017	0.017	0.017
Male	$0.055^{**}$	$0.055^{**}$	$0.052^{**}$	0.049**
	0.016	0.017	0.017	0.017
VIC	0.021	0.026	0.025	0.009
	0.021	0.022	0.023	0.023
QLD	$-0.043^{*}$	$-0.042^{*}$	$-0.045^{*}$	-0.039
	0.024	0.025	0.026	0.025
SA	-0.052	-0.030	-0.041	-0.049
	0.035	0.036	0.037	0.038
WA+NT	-0.017	-0.008	-0.004	-0.007
	0.031	0.031	0.032	0.031
TAS	$-0.096^{*}$	$-0.093^{*}$	-0.068	$-0.118^{**}$
	0.049	0.053	0.052	0.060
Parente' characteristics				
Standardized SES <sup>c</sup>	0.005	0.000	0.001	0.003
Standardized SES	0.005	0.000 0.011	0.001 0.011	-0.003
Voar $19^d$	0.050**	0.011	0.011	0.011
Ital 12	0.039	0.033	0.034 0.033	0.038
Minor or unknown certificate <sup><math>d</math></sup>	-0.004	-0.002	-0.009	-0.010
which of anknown certificate	0.025	0.029	0.029	0.029
Major certificate or diploma <sup><math>d</math></sup>	0.019	0.006	0.005	0.011
Major certificate or diploma	0.023	0.026	0.027	0.026
Bachelor or higher <sup>d</sup>	$-0.049^{*}$	-0.068**	-0.074**	$-0.057^{*}$
Ducheior of higher	0.030	0.033	0.074	0.033
Born overseas <sup>e</sup>	$0.032^{*}$	0.028	$0.032^{*}$	$0.034^{*}$
	0.017	0.018	0.018	0.018
Mother's age $f$	0.005**	0.004**	0.004*	$0.003^{*}$
hiother 5 age	0.002	0.002	0.002	0.002
Mother's total number of children	-0.014**	-0.018**	-0.021**	-0.020**
	0.006	0.007	0.007	0.007
Mother is unpartnered	-0.028	-0.004	-0.007	-0.012
	0.021	0.023	0.023	0.023
Mother is partnered with non-father	$-0.074^{**}$	$-0.072^{**}$	-0.073**	-0.076**
second is posterior of whith hold futility	0.031	0.032	0.033	0.033
Sample size	2249	1938	1867	1867
		1000	1001	1001

Table 14a: Co-residence (marginal effects at the mean based on probit model) Wave 1

*Notes:* The regressions include additional variables, see Table 10a. See page 69 for notes.

	wave z			
	Model 1	$\overline{\text{Model } 2}$	Model 3	Model 4
Youth's characteristics				
Born in 1988	0.026	0.005	0.015	0.016
	0.025	0.027	0.027	0.028
Male	$0.050^{**}$	$0.047^{*}$	0.039	$0.050^{*}$
	0.025	0.027	0.027	0.028
VIC	$0.057^{*}$	0.039	0.021	0.018
	0.032	0.035	0.036	0.037
QLD	-0.043	-0.048	-0.055	-0.058
	0.036	0.039	0.040	0.040
SA	-0.024	-0.041	-0.050	-0.037
	0.050	0.055	0.057	0.057
WA+NT	0.026	-0.014	0.003	-0.005
	0.046	0.050	0.051	0.052
TAS	$-0.235^{**}$	$-0.287^{**}$	$-0.287^{**}$	$-0.271^{**}$
	0.074	0.079	0.080	0.081
Parante' characteristics (2006)				
Standardized SES <sup>c</sup>	0.008	_0.001	_0.006	_0.012
Standardized SES	0.008	-0.001 0.017	-0.000	-0.012 0.018
Vear $12^d$	0.010	0.017 0.042	0.010	0.010
10a1 12	0.030	0.042 0.055	0.045	0.050 0.057
Minor or unknown certificate <sup><math>d</math></sup>	0.034	0.015	0.017	0.007
while of unknown certificate	0.034	0.015	0.011	0.010 0.046
Major certificate or diploma $^d$	-0.001	-0.007	0.001	-0.002
Major certificate of diploma	0.039	0.043	0.044	0.074
Bachelor or higher <sup><math>d</math></sup>	-0.013	-0.005	0.013	0.010
Dachelor of higher	0.045	0.048	0.049	0.010 0.050
Born overseas <sup><math>e</math></sup>	0.115**	0.136**	0.138**	$0.137^{**}$
	0.026	0.028	0.028	0.029
Mother's $age^{f}$	-0.001	-0.000	0.001	0.000
	0.003	0.003	0.003	0.003
Mother's total number of children	$-0.042^{**}$	$-0.043^{**}$	$-0.054^{**}$	$-0.053^{**}$
	0.010	0.011	0.011	0.011
Mother is unpartnered	$-0.061^{*}$	-0.006	-0.001	-0.005
T. T	0.035	0.038	0.039	0.039
Mother is partnered with non-father	$-0.086^{*}$	$-0.095^{*}$	$-0.095^{*}$	-0.074
	0.049	0.051	0.053	0.053
Sample size	1437	1267	1228	1226
T		• •		

Table 14b: Co-residence (marginal effects at the mean based on probit model) Wave 2

*Notes:* The regressions include additional variables, see Table 10b. See page 69 for notes.

	wave 1			
	Model 1	Model 2	Model 3	Model 4
Youth's characteristics				
Born in 1988	-42	-89	-41	-52
	297	327	327	333
Male	$-607^{**}$	$-745^{**}$	$-695^{**}$	$-554^{*}$
	296	326	326	332
VIC	$654^{*}$	367	387	251
	392	432	431	432
QLD	230	36	-14	-30
	421	467	466	467
SA	-862	-1025	-1052	$-1163^{*}$
	591	654	653	652
WA+NT	583	497	482	469
	549	593	592	593
TAS	-442	-502	-561	-527
	779	858	856	867
Parents' characteristics				
Standardized $SES^c$	119	40	38	12
	185	207	207	207
Year $12^d$	-270	-204	-185	-297
	624	701	700	697
Minor or unknown certificate <sup><math>d</math></sup>	544	330	320	251
	490	558	557	555
Major certificate or diploma <sup><math>d</math></sup>	590	431	436	371
	459	519	518	517
Bachelor or $higher^d$	1341**	1241**	$1174^{**}$	$1028^{*}$
	518	582	582	581
Born overseas <sup><math>e</math></sup>	-7	-108	-72	-186
	325	362	361	361
Mother's $age^f$	46	39	43	30
	32	37	37	37
Mother's total number of children	$-694^{**}$	$-773^{**}$	$-792^{**}$	$-727^{**}$
	121	141	141	141
Mother is unpartnered	-641	-277	-282	-257
	394	454	453	451
Mother is partnered with non-father	-319	-371	-442	-277
	514	557	557	556
Sample size	2166	1867	1867	1867

Table 15a: Parental transfer (\$/year) (marginal effects at the mean based on tobit model) Wave 1

Notes: The regressions include additional variables, see Table 11a. See page 69 for notes.

	wave 2			
	Model 1	Model 2	Model 3	Model 4
Youth's characteristics				
Born in 1988	527	850	897	734
	657	627	620	616
Male	$-2318^{**}$	$-2272^{**}$	$-2144^{**}$	$-1656^{**}$
	660	629	623	632
VIC	-854	-603	-563	-762
	860	823	814	809
QLD	$-1807^{*}$	$-1600^{*}$	$-1776^{**}$	$-1499^{*}$
	942	905	896	891
SA	-1228	-832	-955	-1225
	1279	1250	1235	1228
WA+NT	-707	-159	-177	540
	1221	1145	1132	1125
TAS	-1082	-847	-1650	-1908
	1812	1733	1721	1707
Parents' characteristics (2006)				
Standardized $SES^c$	-923**	-649	-651	$-740^{*}$
	419	408	403	402
Year $12^d$	62	-203	-4	-178
	1435	1399	1382	1379
Minor or unknown certificate <sup><math>d</math></sup>	-428	-1129	-1074	-1341
	1134	1114	1103	1097
Major certificate or diploma <sup><math>d</math></sup>	1666	1025	1014	601
	1058	1022	1012	1006
Bachelor or $higher^d$	$3601^{**}$	$2517^{**}$	2539**	1717
	1175	1139	1127	1124
Born overseas <sup><math>e</math></sup>	227	-31	411	133
	717	698	697	697
Mother's $age^{f}$	198**	$130^{*}$	$127^{*}$	97
	71	71	70	70
Mother's total number of children	$-1364^{**}$	$-1313^{**}$	$-1489^{**}$	$-1583^{**}$
	284	285	286	288
Mother is unpartnered	-1244	-493	-506	-286
	904	897	887	883
Mother is partnered with non-father	-1568	-1294	-1534	-1237
	1254	1198	1185	1187
Sample size	1391	1228	1228	1226

Table 15b: Parental transfer (\$/year) (marginal effects at the mean based on tobit model) Wave 2

Notes: The regressions include additional variables, see Table 11b. See page 69 for notes.

V	Vave 1			
	In	Stud	Stud	Not
Model 3	school	full	part	$\operatorname{stud}$
		time	time	
Youth's characteristics				
Born in 1988	0.052**	-0.023	$-0.023^{**}$	-0.006
	0.010	0.026	0.011	0.024
Male	0.013**	0.041	0.000	$-0.054^{**}$
	0.005	0.026	0.011	0.025
VIC	0.024**	0.052	$-0.023^{*}$	$-0.053^{*}$
	0.009	0.033	0.012	0.032
QLD	$-0.025^{**}$	0.027	$-0.025^{**}$	0.023
	0.007	0.035	0.012	0.034
SA	0.012	0.026	0.004	-0.041
	0.012	0.049	0.021	0.047
WA+NT	$-0.018^{**}$	0.042	-0.024	0.000
	0.007	0.045	0.015	0.044
TAS	0.161**	-0.108	$-0.043^{**}$	-0.010
	0.054	0.071	0.015	0.068
Parente' abargateristica				
Standardized SES <sup>c</sup>	0.004	0.004	0 000**	0.019
Standardized SES	0.004	0.004 0.016	-0.020	0.012 0.015
Vour $12^d$	-0.006	0.010	-0.025	-0.076
Teat 12	-0.000	0.108 0.050	-0.023 0.017	-0.070
Minor or unknown certificate <sup><math>d</math></sup>	-0.004	0.074*	_0.011	-0.060
while of unknown certificate	0.004	0.042	0.011 0.016	0.000
Major certificate or diploma <sup><math>d</math></sup>	-0.016**	0.086**	0.006	-0.077**
Major contineate or appointa	0.007	0.039	0.000	0.036
Bachelor or higher <sup><math>d</math></sup>	-0.015**	0.093**	0.009	-0.087**
	0.007	0.044	0.021	0.041
Born overseas <sup><math>e</math></sup>	-0.001	$0.052^{*}$	$-0.031^{**}$	-0.020
	0.005	0.028	0.011	0.027
Mother's $age^{f}$	-0.000	0.006**	$0.002^{*}$	$-0.008^{**}$
0	0.001	0.003	0.001	0.003
Mother's total number of children	0.001	$-0.034^{**}$	0.001	0.033**
	0.002	0.011	0.004	0.010
Mother is unpartnered	0.001	$-0.063^{*}$	-0.000	$0.063^{*}$
-	0.007	0.034	0.014	0.034
Mother is partnered with non-father	0.014	$-0.102^{**}$	0.003	0.084**
-	0.012	0.042	0.019	0.042
Sample size	1867			

Table 16a: Youth study activity (marginal effects at the mean based on MNL model) Wave 1

Notes: The regressions include additional variables, see Table 12a. See page 69 for notes.

Wave 2	2		
	Stud	Stud	Not
Model 3	full	part	$\operatorname{stud}$
	time	time	
Youth's characteristics			
Born in 1988	0.041	-0.016	-0.025
	0.033	0.018	0.031
Male	0.042	-0.009	-0.033
	0.034	0.018	0.032
VIC	0.046	-0.020	-0.026
	0.044	0.022	0.042
QLD	-0.038	0.006	0.032
	0.047	0.025	0.044
SA	0.036	-0.002	-0.034
	0.066	0.035	0.061
WA+NT	$-0.111^{*}$	0.023	0.088
	0.059	0.035	0.058
TAS	0.001	-0.042	0.040
	0.092	0.040	0.089
$\mathbf{P}$			
Characteristics (2000)	0.006	0.090*	0.015
Standardized SES	-0.000	$0.020^{\circ}$	-0.015
$V_{ran}$ 19 $d$	0.021	0.012	0.020
Year 12 <sup>-</sup>	0.024	0.038	-0.003
Minor or unknown contificated	0.072	0.045	0.002
Minor of unknown certificate	0.073	-0.027	-0.045
Maion contificate en diplomad	0.050	0.020	0.051
Major certificate or diploma-	0.070	-0.015	-0.000
$\mathbf{D}$ achalan an himhan <sup>d</sup>	0.000	0.020	0.040
Dachelor of higher	0.142 0.058	-0.055	-0.107
Down overcoose	0.050	0.020	0.000
Dorn overseas	-0.002	-0.010	0.072
Mathew's and	0.000	0.020	0.000
Mother's age	0.003	0.000	-0.004
Mothen's total number of childre	0.004	0.002	0.003
Mother's total number of children	-0.005	-0.000	0.011
Mathan is unnorthand	0.014	0.000	0.013
Mother is unpartnered	-0.077	-0.000	0.083*
	0.040	0.020	0.044
Mother is partnered with non-father	$-0.205^{**}$	U.U/U <sup>*</sup>	0.135*
<u> </u>	0.055	0.042	0.057
Sample size		1226	

Table 16b: Youth study activity (marginal effects at the mean based on MNL model) Wave 2  $\,$ 

 $\it Notes:$  The regressions include additional variables, see Table 12b. See page 69 for notes.

	wave 1			
	Emp	Emp	Unemp	Not in
	full	part		labour
	time	$time^a$		force
Youth's characteristics				
Born in 1988	0.024	-0.038	-0.014	$0.027^{*}$
	0.022	0.026	0.017	0.015
Male	$0.179^{**}$	$-0.190^{**}$	0.015	-0.003
	0.022	0.024	0.016	0.014
VIC	0.010	$0.062^{*}$	$-0.033^{*}$	$-0.040^{**}$
	0.030	0.033	0.019	0.016
QLD	0.052	0.004	$-0.032^{*}$	-0.024
•	0.032	0.036	0.019	0.018
SA	-0.053	$0.080^{*}$	0.027	$-0.055^{**}$
	0.041	0.048	0.031	0.019
WA+NT	0.126**	-0.011	$-0.067^{**}$	$-0.049^{**}$
	0.045	0.046	0.021	0.019
TAS	0.216**	-0.083	$-0.102^{**}$	-0.031
	0.079	0.072	0.018	0.025
Parents' characteristics	0.019	0.000	0.015	0.000
Standardized SES	0.013	0.008	-0.015	-0.000
V 10d	0.014	0.010	0.010	0.009
Year 12 <sup>°</sup>	0.026	-0.049	0.003	0.019
M: I I'C I d	0.048	0.032	0.034	0.034
Minor or unknown certificate <sup>a</sup>	0.058	-0.048	0.015	-0.025
	0.039	0.042	0.028	0.023
Major certificate or diploma"	0.006	-0.019	0.004	0.008
	0.034	0.039	0.020	0.024
Bachelor or higher	-0.086	0.011	0.023	0.052
D	0.035	0.040	0.030	0.030
Born overseas <sup>e</sup>	-0.035	-0.019	0.017	0.037
	0.024	0.020	0.010	0.017
Mother's age	-0.008	0.000	0.001	0.001
	0.002	0.003	0.002	0.002
Mother's total number of children	0.018	-0.014	0.001	-0.005
	0.009	0.011	0.000	0.000
Mother is unpartnered	-0.012	0.054	-0.014	$-0.029^{*}$
	0.030	0.034	0.020	0.017
Mother is partnered with non-father	0.052	-0.030	0.009	$-0.032^{*}$
<u>a</u>	0.039	0.043	0.027	0.019
Sample size		19	38	

Table 17a: Youth work activity (marginal effects at the mean based on MNL model) Wave 1

*Notes:* The regressions include additional variables, see Table 13a. See page 69 for notes.

	wave 2			
	Emp	Emp	Unemp	Not in
	full	part		labour
	time	$time^a$		force
Youth's characteristics				
Born in 1988	0.005	-0.010	-0.006	0.011
	0.033	0.033	0.017	0.017
Male	0.231**	$-0.226^{**}$	0.001	-0.007
	0.031	0.031	0.016	0.016
VIC	-0.023	0.027	0.012	-0.016
	0.043	0.044	0.024	0.020
QLD	0.014	0.005	0.008	-0.027
•	0.046	0.047	0.025	0.021
SA	0.000	-0.075	0.052	0.022
	0.066	0.064	0.044	0.035
WA+NT	0.048	0.034	-0.015	$-0.067^{**}$
	0.061	0.061	0.030	0.019
TAS	-0.034	-0.032	0.044	0.022
	0.087	0.090	0.056	0.045
Parents' characteristics (2006)		0.070**	0.015	0.001
Standardized SES <sup>e</sup>	$-0.058^{**}$	0.072**	-0.015	0.001
V 10d	0.021	0.021	0.010	0.011
Year $12^a$	-0.065	0.070	0.010	-0.015
	0.004	0.072	0.040	0.033
Minor or unknown certificate <sup>a</sup>	-0.001	0.025	0.011	-0.035
	0.054	0.059	0.031	0.024
Major certificate or diploma <sup><i>a</i></sup>	-0.042	0.035	0.015	-0.007
	0.050	0.054	0.029	0.026
Bachelor or higher <sup>a</sup>	$-0.097^{*}$	0.057	0.044	-0.003
<b>D</b>	0.055	0.060	0.035	0.029
Born overseas <sup>e</sup>	-0.135**	0.129**	-0.020	0.026
	0.034	0.037	0.018	0.020
Mother's $age^{J}$	-0.004	0.004	-0.001	0.001
	0.004	0.004	0.002	0.002
Mother's total number of children	-0.012	0.011	0.009	-0.008
	0.014	0.014	0.007	0.007
Mother is unpartnered	-0.012	0.042	0.005	$-0.035^{*}$
	0.045	0.047	0.024	0.020
Mother is partnered with non-father	-0.062	-0.043	$0.068^{*}$	0.037
	0.055	0.061	0.039	0.037
Sample size	1226			

Table 17b: Youth work activity (marginal effects at the mean based on MNL model) Wave 2

Notes: The regressions include additional variables, see Table 13b. See page 69 for notes.