



Home leaving age in Australia; determinants, and the effect on labour market and social outcomes.

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Disclaimer

This thesis uses unit record data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey. The HILDA Project was initiated and is funded by the Australian Government Department of Social Services (DSS) and is managed by the Melbourne Institute of Applied Economic and Social Research (Melbourne Institute). The findings and views reported in this thesis, however, are those of the author and should not be attributed to either DSS or the Melbourne Institute. Any errors or omissions are my own.

Abstract

Leaving the parental home is a choice that everyone makes at some point in their life. The decision that all individuals make is choosing the optimal age to move from co-residence to independent living. It is well established that there are costs which children have to endure when this decision is made. These could be financial (Aassve et al. 2007; Holdsworth 2000) or emotional (De Jong Gierveld et al. 1991; Blaauboer and Mulder 2010). In this thesis I build on the work done by Ribar (2013), which examines whether leaving home leads to greater financial hardship in the following years. Specifically, I build on this study by examining what characteristics of the individual and their background influence the age they decide to leave home. Then I examine what effect leaving home at different ages has on short-run labour market and social outcomes.

As in Ribar (2013), the Household, Income and Labour Dynamics in Australia (HILDA) survey data are used in this analysis. This is an annual longitudinal survey which began in 2001. The main sample of individuals used in my analysis are those who I observe co-residing with their parents in the first wave of the survey and then outside the parental home in a later wave. Thus, I am able to examine what factors influence the age that individuals decide to leave their parents' home. It is interesting to note that many factors influence the individuals' decision to leave home such as; relationship with parents, region and remoteness of location the individual grew up in, personality and relative household income. This analysis confirms what has been observed in the existing literature.

The focus of this thesis is examining how the age an individual leaves home impacts their labour market and social outcomes in later waves of the HILDA survey. The labour market outcomes which I examine are employment status and real hourly wage rate. The social outcomes that I examine are the relationship status of individual, defined as being in a relationship (married or de-facto) and completing education beyond the end of high school. These outcomes are examined using three different measures of home leaving age; a continuous variable, a zero/one dummy variable indicating leaving home aged 20 years or younger compared to leaving home aged 21 and older and finally, a categorical variable that splits the individuals into four groups. These four groups are aged 15-18 (young leavers), 18-20 (common ages), 21-22 (late leavers) and 23-28 (extreme late leavers).

My results can be best summarized as follows: first, the age men and women decide to leave home is determined by a vast range of variables. As such these variables need to be included in the labour market and social outcomes analysis to avoid omitted variables bias. Second, the age that men leave home, has no statistically significant impact on any of the short-run labour market and social outcomes examined. Third, females who leave home later receive a statistically significantly lower hourly wage rate and have a lower probability of being in a relationship in the latter waves of the HILDA survey. The majority of this difference is driven by females who leave home aged 21-22 compared to 19-20. I observe no difference in these outcomes for females who leave home very late (23-28) compared to the reference category (19-20), this may be due to individuals misunderstanding the question on the age they first left their parents' home.

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1. Introduction

Our lives are full of choices. Some of these we make every day without a moment of hesitation like, whether to have a tea or a coffee. A choice like this has very little impact on the course that the rest of one's life will take. Some choices are more challenging and potentially have a much larger impact, such as what car to purchase. Making the wrong choice in this case has a much greater cost, so more time needs to be spent making the correct decision. One of the biggest choices that children have to make is deciding when to leave the parental home and start living independently. This thesis first examines how a child's background, personality and family dynamics influence the age at which they first leave their parents' home and then looks at how the timing of this separation impacts short-run labour market and social outcomes.

This thesis uses data from the Household Income and Labour Dynamics in Australia (HILDA) survey. The HILDA survey is a representative annual longitudinal survey of the Australian population. Specifically, data from the first eleven waves of HILDA which cover 2001 through to 2011 are used. The first wave of the HILDA survey is used to observe the individuals co-residing with their parents. I then use the later waves to measure whether children remain living with their parents or are now living independently. This creates a subsample of individuals in the HILDA survey who left their parents' home during the HILDA survey period and prior to the beginning of the seventh wave.

The panel of labour market and social outcomes used in the econometric analysis are from different waves of the HILDA survey, depending on the wave the individual is first observed outside their parents' home. Ribar (2013) notes that there is a transition period of about three years after leaving the parental home in which the individual is more likely to experience financial or emotional hardship. In order to abstract from this transitional effect, the two waves of the HILDA survey after an individual leaves their parents' home are excluded from the panel of outcomes. For example, if the individual left their parents' home prior to the start of the second wave; waves three and four are excluded from the analysis and waves five through to eleven are used to examine short-run labour market and social outcomes. For the main analysis, we examine outcomes for individuals who are between 25

and 34 years-old. This restriction is included to ensure that the majority of the individuals are in the labour force at a similar point in their career and life paths.

The questions examined in this thesis are important for a number of reasons. First, every single individual will at some point leave their parents' home, so leaving at the wrong time is a potential cost that can affect many people. The decision to leave ones parents' home can be influenced by a vast number of factors including the stability and strength of relationship an individual has with their parents. If the child gets along well with their parents they may decide to stay at home longer than they would otherwise. Second, this area of research has been relatively unexamined in past literature. Some of the existing studies (Gutmann et al. 2002; Flatau et al. 2007 etc.) focused on when individuals left their parents' home, and how this has changed over time and the variation by country and region. Whilst other studies (Buck and Scott 1993; Chiuri and Del Boca 2010 etc.) focused on the main reasons an individual provides for deciding to leave the parental home.

My thesis relates most closely to a small number of papers which examine whether or not leaving home is a hardship. This includes a recent paper that examines this question in the Australian context, Ribar (2013). This study examines individuals after they leave their parents' home, but only looks at outcomes immediately after the individual has left. It finds that experiences of financial hardship increase immediately after leaving home but settle down to the national average level after 3 or 4 years. However, no attempt is made to examine whether financial hardship experienced by individuals differs depending on when they left their parents' home, which is the focus of my thesis.

Australia is an interesting country to examine the impact of the age of leaving the parental home, as the majority of the transitions from the parental home fall within a small age range. This age range sits between very young ages of Northern European countries and very old ages as is common in Southern European countries. Australia is also a highly urbanised country, with approximately 85% of the population living in urban areas (Hobson 2003). Due to this, many individuals who attend university/find employment have the option of remaining at home, since the majority of the population lives close to tertiary institutions/large labour markets. Hence, in Australia, the decision to leave home for future education/employment opportunities is more of a choice than in other countries where the population is less urbanised.

This thesis is organised into the five following chapters: (1) a review of the literature which examines the process of leaving the parental home; (2) a detailed description of the data and the processes used to create the subsample of individuals' for the econometric analysis; (3) a discussion of the methodology used in the regression analysis; (4) a presentation of the econometric results; (5) the conclusion.

The literature review examines the past research that relates to the age that children leave their parents' home. This includes papers that look at the trends of when individuals leave home and how this has changed over time. Along with these papers, I also review the papers that examine why individuals leave home at different ages, and the different reasons individuals provide to justify their decision to leave their parents' home. The papers in the home leaving literature that are of specific importance are those which examine the costs associated with leaving home; these papers are discussed in detail in the literature review. The final set of papers I discuss are those which are core to any labour economic analysis. These papers are important as they justify the choice of outcomes examined in my analysis and provide expected signs and magnitudes for coefficients of the other control variables.

The next chapter then describes in detail the survey data which is used in this thesis, the Household, Income and Labour Dynamics in Australia (HILDA) survey. I first describe the HILDA survey in detail, then I justify why I am using it for this thesis. I then discuss the process that is used to create the subsample of individuals used for the econometric analysis. Finally, the subsample of individuals who left home between the second and seventh wave of the HILDA survey is compared to the robustness sample, which includes individuals who left their parents' home prior to the first wave the HILDA survey.

The methodology chapter describes the models used in the econometric analysis and shows how the models are built up to include personality controls and parental controls at the time the individual decided to leave home. Specific focus is made to ensure that the time the control variables are measured is explained. This is important because some control variables are measured prior to leaving home, whilst other control variables are measured at the same time as the outcome variable.

The results chapter presents the main findings of the econometric analysis. There are three sets of results which are presented here. First, in order to gain some insight into the individuals' decision to leave their parents' home, I examine how the age individuals leave home relates to observable characteristics of the individual and their parental household, such

as where the child grew up, how many people there are in the household, how wealthy the household is, the strength of relationship that the individual has with their parents and whether the child lived with both parents or only one prior to leaving home. Second, I present estimates of the impact that the age that an individual leaves their parents' home has on their short-run labour market outcomes. Third, I present the estimates of the effect that the age individuals leave home has on social market outcomes, in later waves of the HILDA survey.

I then conclude by summarising the findings of the econometric models. I also look at where this research could be heading in the future, such as performing this analysis with a different dataset in a different country, where the average home leaving decisions are dramatically different to those of Australia. Also, in this chapter, I examine what the findings of this thesis could mean for interested parties such as; policy makers, parents and children who are thinking about moving out of their parents' home to set up a household of their own.

2. Literature Review

In this chapter, I review the previous literature that is relevant for my thesis. My topic brings together three parts of literature. First, I summarize the studies which examine the costs of moving out of one's parental home. Second, I summarize the literature that examines at what age's men and women leave home, how this varies across countries and how this has changed over time. Third, I discuss the papers that examine the impact of human capital investments on youth labour market outcomes.

2.1. Costs of leaving home

In this section, I review the existing literature that examines the costs that individuals experience during the transition from co-residing to independent living. The types of cost described in the literature include those costs incurred during the process of setting up a household. The existing literature has also described costs which an individual may experience for some years after leaving the parental home. These costs could be financial due to the lower per capita household income, time and effort costs associated with household services that are no longer able to be provided by parents or emotional costs of independent living. The papers that examine these costs associated with and experienced by youths as and after they leave their parents' home are discussed below.

However, the very first thing which needs to be discussed in this literature review is how home leaving age is defined by the existing literature. The most common way that home leaving age has been defined by the existing literature is; the age of the individual when they first no longer reside at their parent/parents' home or with their parent/parents', excluding any temporary absence to attend boarding school (seen in Cobb-Clark 2008; Yi et al. 1994; Cobb-Clark and Ribar 2012; Gutmann et al. 2002 among others). For this data to be accurate, the survey questions need to be carefully worded so that the respondents realize that the age they first left home is being asked for, as opposed to the most recent time they left their parents' home. This is especially important when the child moves out of their parents' home and returns again before the survey takes place. The phenomenon of children leaving their parents' home has been observed in many papers in this field of literature (Da Vanzo and

Goldscheider 1990; Hartung and Sweeney 1991; Goldscheider and Goldscheider 1998; Beaupré et al. 2006, etc.).

The first paper that I discuss in detail is Ribar (2013). In this paper, the author examines whether an individual is more likely to experience financial hardship after leaving the parental home, and if there is a greater likelihood how long after leaving the parental home does the increased risk remain. This paper is a useful place to begin the literature review since it uses the Household Income and Labour Dynamics in Australia (HILDA)¹ dataset, which is the same dataset that I use for my analysis. Ribar (2013) examines how measures of financial hardship and the main activity² of the individual, such as education or employment vary by, and how long after an individual leaves their parents' home. However, a limitation of this paper is that no attempt is made to examine how these outcomes vary by the age that an individual leaves their parents' home. Ribar (2013) is useful for the analysis in this thesis as it provides the reasons to exclude the labour market outcomes immediately after leaving the parental home. This is so I can examine the short-run labour market costs associated with the age an individual leaves home and exclude the transitional labour market costs.

Ribar (2013) uses a sub-sample of individuals who left their parents'³ home aged between 18 and 25 at some point in time between waves two and nine of the HILDA survey. Ribar (2013) showed that the individuals experienced a drop in income adjusted for household size⁴ immediately after leaving home and continues to be significantly lower for the first four years the individual is outside the parental home. The author was able to show that, in the year immediately after leaving the parental home, the individual is more likely to be employed and less likely to be in education than they were when they lived with their parents. Ribar (2013) also showed that the men and women are more likely to experience financial hardship for the first two and three years respectively that they lived outside the parental home.

I build on this work done by Ribar (2013), to examine how the age which an individual decides to leave their parents' home affects the short-run labour market and social

¹ Specifically waves 1-9 (2001-2009) are used by Ribar (2013).

² Ribar (2013) describes main activity as either employed, education or inactive.

³ Ribar (2013) defines parents' home as birth parents, step parents or legal guardian and excludes individuals who were only living with other relatives such as Aunties or Uncles.

⁴ Ribar (2013) uses the Australian Bureau of Statistics Adjustment of 1 for the first adult then an addition 0.5 for each of the other adults and 0.3 for each child under the age of 15 years (seen in ABS 2012).

outcomes of the individual. Where Ribar (2013) examines the transition between co-residence and independent living and how the individual is affected during this transition, I look at the individuals' outcomes over a longer horizon and examine how these outcomes are influenced by the age at which first separation takes place. Ribar (2013) provides guidance for the length of times which these outcomes can be described as transitional as opposed to short-run.

Aassve et al. (2007) uses data from 13 European countries⁵ to investigate whether or not leaving home leads to an increased likelihood of experiencing poverty or not. The authors use propensity score matching on observable characteristics to estimate what the likelihood of experiencing poverty is if the individual hadn't left their parents' home. For all countries except the Netherlands, Aassve et al. (2007) show that there is a statistically significant increase in the likelihood of experiencing poverty when the individual leaves home, as opposed to remaining co-residing with their parents. Aassve et al. (2007) also examines whether the cross country differences in poverty rates can be explained by the difference in the leaving age of children in the countries examined. However, the difference in the leaving age only partially explains the difference in poverty rates, which is expected due to the other fundamental differences in these countries, such as income level, government financial support available and the willingness of individuals to ask for help.

One obvious cost of leaving home that an individual experiences is the cost of one's own housing, which could be either the purchase of a house or the rental of a house or apartment. The effect that the housing market has on an individual's decision has been noted by multiple papers, including Cobb-Clark (2008) in the Australian context. In this paper, the author notes that the increasing price of housing in Australia over the past 30 years could be a contributing factor for the increase in the length of time that children co-reside with their parents. A similar trend is noticed in Modena and Rondinelli (2011) for Italy. In this study, even though the leaving age is at the extreme upper end of the worldwide leaving age and has been for some time, the increasing house prices and rental prices is correlated with children remaining living with their parents even longer.

This affordability issue is not just a recent development, as it was also noted in Jones (1995). In this book, the author notes that the decision to leave home made by Scottish youths

⁵ The 13 countries in Aassve et al. (2007) are: Germany, Denmark, the Netherlands, Belgium, France, the UK, Ireland, Italy, Greece, Spain, Portugal, Austria and Finland.

is not always a choice and is sometimes determined by constraints out of the control of the individual. One constraint that was mentioned in this study is that individuals may choose to leave their parents' home earlier, if there is insufficient space or freedom when they are living at home. This may be caused by having a large family, low household income or overly involved parents. Jones (1995) also identified some factors which may lead to children leaving their parents' home at later ages, such as cost of moving from their parents' home. Jones (1995) argued that current policy, which is formed under the assumption that all individuals who leave home can afford to live independently, is misinformed. This is because some individuals will leave home even when they struggle to afford independent living due to the poor situation they are experiencing at home and the government needs to have policies in place to support this group of individuals'. Although this has been noted, there is still a correlation between the affordability of independent living and when the Scottish youths decide to leave home.

Valentine (2003) examines many of the different transitions that individuals experience between the time they are children and when they become adults. The major transitions that are noted in this paper are those into the labour market, out of formal education and away from their parents' home and dependency. Valentine (2003) noted that, these transitions are becoming increasingly blurred in the current society. Leaving home is no longer a transition into married life and children are now increasingly leaving their parents' home for education or employment opportunities. However, if an individual no longer co-resides with their parents and is in full time education or struggles to find adequate employment it may be that an individual is still at least partially dependent on their parents for financial support even when they live independently. This is important to note because children who come from wealthy families or have very good relationships with their parents will be more likely to receive this out of home assistance. This will lead to them leaving home earlier than other individuals or being less likely to return home after leaving their parents' home.

Holdsworth (2000) examines how the amount of support a child receives once they are outside the parental home is different across European countries. In this study, the author observes that once the child is out of their parents' home in Britain and Norway, their parents let the child succeed or fail as they may, this promotes the child to learn and grow more quickly than in a country such as Spain, where children receive more financial support when they are out of their parents' home. Holdsworth (2000) suggests parents in Spain may be

providing greater support to their children so that their children can maintain a level of material wellbeing that reflects well on the family in general.

The papers above have discussed how the costs of housing in a country may influence an individual's decision to leave home. These papers show a consistent trend of leaving home being an expensive endeavour and causing a greater likelihood of financial stress or poverty. However, there are other costs that also have to be considered in an individual's decision to leave their parents' home. These costs that individuals have to endure after leave home are non-financial benefits that parents provide that the individual is no longer receiving. This could include household services such as care and company, washing and cleaning and other chores, that parents perform for the household and once the individual leaves their parents' home they no longer receive any of these positive benefits. There are a few papers that have discussed this non-financial cost that children incur when they decide to leave home. These papers are discussed in the following paragraphs.

The first paper that examined these costs is De Jong Gierveld et al. (1991). In their study, the authors use Dutch data to examine the impact that both transferable and non-transferable resources have on the timing of leaving the parental home. Like the papers discussed previously, these authors find that higher levels of transferable resources are correlated with children leaving their parents' home at young ages. Alternatively, if the family has higher levels of non-transferable resources the child will remain at home longer than an equivalent household with a lower level of non-transferable household resources. In their study, De Jong Gierveld et al. (1991) defined non-transferable household resources as resources or benefits the child receives only when they co-reside with their parents. The examples used in this paper of non-transferable household resources are taking care of the household chores, preparing meals and the non-material being around a caring family.

De Jong Gierveld et al. (1991) estimate that having higher levels of these three characteristics decreases the likelihood of having left by a given age, so they remain in the household longer. Although, a limitation of this paper is that the authors do not allow for interactions between non-transferable household resources and transferable household resources. This is a potential issue because high levels of the non-transferable household resources may be correlated with household wealth, which is the transferable household resource. Moreover, it is not completely clear whether the correlation between transferable and non-transferable resources is positive or negative. It could be that a higher level of

household wealth is associated with lower levels of these non-transferable resources, since both parents are earning income so have less time to provide these non-transferable household resources. However, this correlation may be positive if one parent is employed in a job that pays very well, therefore the other parent may not have to work and thus is able to provide the non-transferable household resources.

Blaauboer and Mulder (2010) model how the family structure, atmosphere and values of the household affects the child's decision on the ideal time to leave their parents' home. These authors noted that non-material aspects of the household lifestyle can influence the age that children leave home. If the household has a specifically strong atmosphere or values this might encourage children to remain at home longer to continue receiving the benefit of these structures. Blauboer and Mulder (2010) label this the parental relationship, and if the parental relationship is better children will remain at home longer, regardless of the reason that is provided for leaving home.

Blaauboer and Mulder (2010) also noted that the changes in the family structure can influence the child's decision to leave home. The mechanism that the authors noted here is that unusual living arrangements, such as step families or single parent families, will often result in earlier home leaving ages than the regular, natural two parent families (this is also noted in Mitchell et al. (1989)). Blauboer and Mulder (2010) hypothesised that, if there is a change in the family structure, the child may decide to leave home earlier than they otherwise would have because of the increased cost of residing at the family home. In this case, leaving home would have an additional benefit as the child no longer has to endure the unpleasant family situation.

This section summarizes the existing literature that examines the costs of leaving the parental home. These studies focus on the cost incurred at the time of leaving home and in the years immediately following, which may lead to an individual delaying the leap from co-residence to independent living. None of these studies examine how the age an individual leaves home affects the size of the costs. My study attempts to add some balance to the discussion of this decision by examining whether the age an individual decides to leave home has some costs later in life.

2.2. Trends in home leaving age

In this section, I summarize the literature that examines when children leave their parents' home and the main reasons why children decide to leave their parents' home. The majority of this literature comes from the European context where there is data available on children's justification to leave home. I then review the literature that examines how this home leaving age has changed over time and studies that show the distribution of ages that individuals leave home. Finally, I review the literature that attempts to examine what characteristics influence when the individual decides to leave the parental home. When these papers are discussed in detail, I place specific focus around the data which is used by the different studies. The data which is used by these studies fall into one of three categories; retrospective cross-sectional survey, a panel survey where individuals are observed leaving home or census level data. I also identify the strengths and weakness of the three different categories of data which are used by papers in this literature.

The existing literature explains the main reason individuals provide for leaving the parental home these fall into the following three categories; for autonomy or independence, for education or employment opportunity and for marriage or to live with a partner (Billari and Liefbroer, 2007; Johnson and DaVanzo, 1998; Buck and Scott, 1993). Regardless of the research questions examined in these studies, there is one major pattern observed worldwide which is, on average, females decide to leave their parents' home approximately a year younger than their male counterparts.

The main characteristic of the existing literature in this field is that the data regarding when an individual leaves their parents' home is often a retrospective question (see Guttmann et al. 2002; Chiuri and Del Boca 2010; Mitchell et al. 1989 etc.). As such, there has been a development in the literature towards using focused surveys that can track individuals' over time and observe them leaving their parents' home, or retrospective questions only a few years after the point that the individual left their parents' home⁶. However, these samples have one major weakness in that they only provide insight to the leaving patterns of the specific cohort surveyed and no comparisons can be made with past cohorts. Alternatively, the data in this field comes from census data, so all individuals are

⁶ These datasets included HILDA (Household Income and Labour Dynamics in Australia) and NCDS (National Child Development Study from Britain) Holdsworth (2000)

observed every five or ten years and thus, it is possible to observe what proportion of each cohort is living with their parents at each census point.

Chiuri and Del Boca (2010) uses data from the European Community Household Panel (ECHP) to show a cross country comparison of the age children leave home over 14 European countries⁷. The authors find that children from Scandinavian Countries, such as Denmark and Finland, leave the parental home earlier than those in Mediterranean Countries including Spain and Italy. These authors also note that females in all the European countries tend to leave home at a younger age than their male counterparts. Although, within all these countries there is substantial variation in the age that individuals leave their parents' home.

Chiuri and Del Boca (2010) estimate regression models to examine which factors influenced the age children left home. When the Europe wide model is estimated, education, the number of siblings, the local unemployment rate and having grandparents in the parental home increase the likelihood of remaining living with one parent's. The presence of strong youth support policies increased the likelihood of a child leaving the parental home earlier. These positive and negative effects are much stronger for females than they are for males, indicating that daughters are more sensitive to external factors than sons. Once regions were investigated separately, very few of the variables are significant, indicating that there may be systematic differences in the age children leave based on where they grew up.

A similar study, Blaauboer and Mulder (2010), use the first wave the Netherlands Kinship Panel Study (NKPS), which is a national representative study of over 8000 individuals between the ages of 18 and 22. All of the data used in this paper is sourced from retrospective questions such as: *In which year did you leave home and go live on your own?* There are similar retrospective questions regarding what the occupations of their parents were when they were 15 years old. The benefit of these retrospective questions is that it enables the authors to use a large sample size; however, there is a concern about how accurately these retrospective questions are answered.

Blaauboer and Mulder (2010) present results showing that there are gender differences in the timing an individual leaves the parental home. Along with this, family structure plays an important role for the child in determining the ideal time to move out of their parents' home. Blaauboer and Mulder (2010) also found that parental resources such as

⁷ Complete list of countries in this paper: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain and UK.

parental education and socio-economic status played a significant role in the decision of children on when to leave their parental home. These parental resources often delayed the transition from the parental home and were much more important for females than for males.

Flatau et al. (2007) use the first wave of the Household, Income and Labour Dynamics in Australia (HILDA) survey to show the trends in the in the age the children leave the parental home in Australia. These authors use the retrospective question in the HILDA survey which is: “How old were you when you first moved out of home as a young person (or are you still living at home with your [parents/guardians])?” As can be seen in the graph below, Australian females tend to leave the parental home before their male counterparts. The graph also shows that the age that both groups leave home has been falling for the cohorts born after 1931 and is fairly constant between 19 and 20 since the 1950 birth cohort.

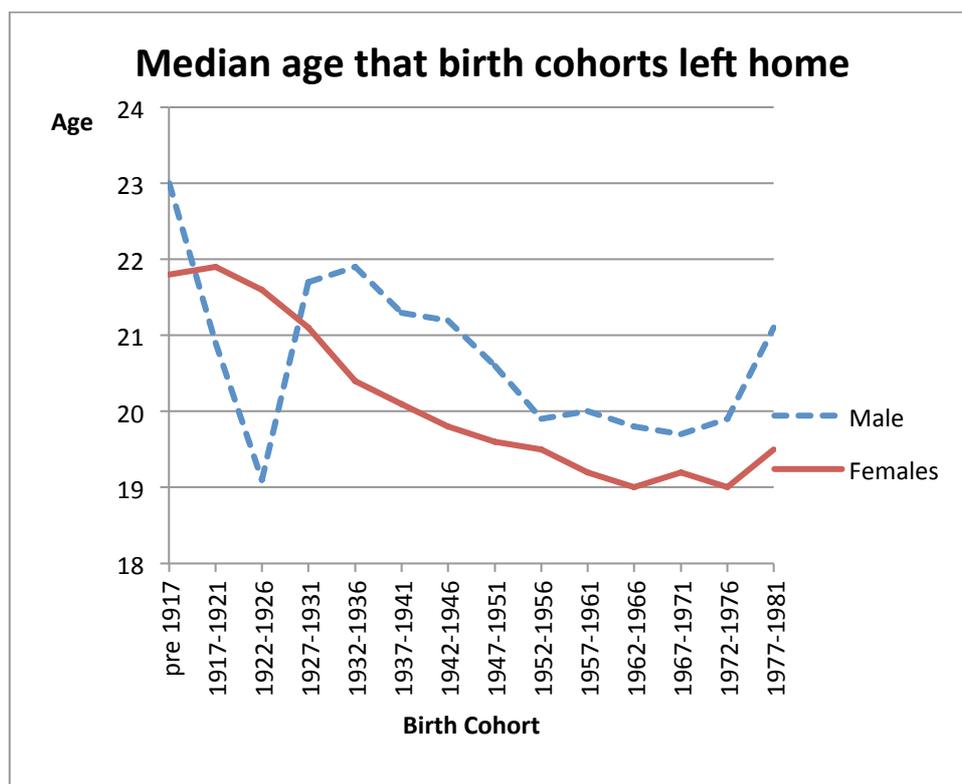


Figure 2.1: Recreated using the data presented in Flatau et al. (2007)⁸

⁸ Data were sourced from wave 1 of HILDA survey

It can be seen in Figure 2.1 above that there has been a recent trend of Australian children, both male and female, remaining living with their parents for longer. This trend has also been identified and discussed in other studies such as Weston et al. (2001) and Cobb-Clark (2008). These two studies identified possible causes of this increased age that Australian children leave home. These include greater non-transferrable resources and a comfortable home environment that the children would not be able to enjoy outside the parental home. Weston et al. (2001) also identified that there is an increasing trend in children leaving home and then returning at some point later in life.

Gutmann et al. (2002) uses American census level data to show that there has been a recent increase in the average age that American children leave their parents' home. They show this by estimating the median home leaving age of birth cohorts by examining the proportion of individuals aged between 15-29 who live with their parents and without their parents at the census point. However, the strength of this study is that the authors show that not all individuals leave at this median age. This is done by showing that groups of individuals leave home at different median ages and more importantly, by estimating the interquartile range of home leaving ages. Over the 100 years of data Gutmann et al. (2002) use, the interquartile range of home leaving age is between 4 and 8 years for each group⁹, this range was getting smaller in the 1960s and 1970s, but has been increasing back towards eight years since then. This indicates there is significant variation in when individuals leave home.

White and Lacy (1997) use the first wave of the US National Survey of Families and Household from 1986. These authors examine a retrospective home leaving age question and show that there is a vast range in the age individuals leave their parents' home. This study attempted to use this cross-sectional variation to examine whether the age an individual left home has an effect on educational attainment. White and Lacy (1997) only finds difference in educational achievement for those who leave home directly to pursue education, but no difference for the population as a whole.

Mitchell et al. (1989) is one of the first studies to examine the factors which influence the decisions of children on when is the right time to leave their parents' home. The data which Mitchell et al. (1989) used are sourced from the 1984 Family History survey, which was conducted in Canada by the Canadian statistics department. In their study, the authors

⁹ Gutmann et al. (2002) splits the population into the four following groups; White Males, White Females, Black Males and Black Females.

determine that type of family structure, the sex of the child and the region an individual grew up in all statistically significantly impact the age that the individual moves out of the parental home. However interestingly, the educational achievement of the individual has no statistically significant impact on the age which they moved out of their parents' home.

Aquilino (1991) showed that the characteristics of the individual have similar effects on the age an individual leaves home in the American context, using the National Survey of Families and Household. The author presents logit models that estimate the probability of leaving home prior to turning 19. The main findings are that individuals who grew up in non-standard households such as step parents, single or adopted households are all more likely to have left home before turning 19. Interestingly, the authors also showed that individuals who are older at the time of the survey are more likely to have left their parents' home aged less than 19. This suggests a trend that the age people leave home is increasing.

In an early Australian study, Haurin et al. (1997) examine what characteristics of the individual increase the probability they reside outside the parental home. The authors model the decision on whether to live apart from ones parents as a function of individual characteristics such as age, ethnicity and gender and regional housing costs, using rental prices. The data used by Haurin et al. (1997) are sourced from the Australian Longitudinal Survey. The authors use the sample of individuals who resided in the Australian capital cities¹⁰, as these are the only places where cost of renting data is available. However, this has one major limitation as individuals may choose to move to places where the rent is lower.

However, the main findings of Haurin et al. (1997) are consistent with the literature from other countries. These findings can be summarized in the following three statements. First, individuals who are married, have children and earn higher wages are more likely to reside separately from their parents. However, this can only be interpreted as a correlation not as a causal relationship. Second, all else equal, men are less likely to live independently. Third, individuals with more siblings, people from non-standard families and those people whose parents have high education are more likely to live independently.

Similar analysis has been performed using data from many different countries such as; Zorlu and Mulder (2011) for the Netherlands, Johnson and DaVanzo (1998) for Malaysia and Juang et al. (1999) and Silbereisen et al. (1996) in the German context. A consistent finding

¹⁰ These state capitals are; Sydney, Melbourne, Brisbane, Perth, Adelaide, Canberra, Hobart and Darwin.

with all the studies in this area is that females leave home at younger ages than males and the family relations are especially important in determining the age an individual leaves home. The studies which examine where the child grew up find big differences between areas, especially a rural urban gap. As such, it is useful to include all of these characteristics in the models which examine the determinants of the home leaving age, to avoid omitted variables bias.

These papers are useful to consider for my analysis as they provide guidance for which variables I expect to have significant impact in determining when a child decides to leave home. These include where the individual grew up, ethnicity, personality and family characteristics. Also importantly, the existing literature suggests that these regression models should be performed separately for males and females, as there may not just be a level difference in when males and females leave home, but also the control variables may affect males and females differently.

2.3. Modelling Labour Market Outcomes for Youth

In this section, I examine how the existing literature models the labour market outcomes of youths. This literature uses the standard models of wages and labour supply, which are the two labour market outcomes that I examine in my thesis. Typically, these studies focus on the role of human capital investments measured by education and work experience (Mincer 1958, 1962; Becker 1962). Recent papers have expanded on these models to examine whether regional differences, the impact of race and country of birth, personality and parental characteristics can influence the likelihood of being employed or the hourly wage rate the individual earns. In the following paragraphs I briefly discuss how these control variables are included in the existing econometric models.

Since these models have been developed, it has been common practice to analyse males and females in separate regressions. This is because there may not just be a levels difference in earnings and employment rates, but the returns to education or work experience may be different for men and women (Tansel 1994; Psacharopoulos and Patrinos 2004; Polacheck and Kim 1994). The educational achievement was originally measured in number of years of education the individual completed. However, there has been a development in

these models to include education in terms of level of qualification (Lauer and Steiner 2000; Blundel et al. 1999; Kidd and Shannon 1996).

Similarly, the founding papers in this area of analysis use the number of years the individual could have been working to control for work experience. This is calculated by the current age of individual minus their age when they completed education. However, this has been improved in recent studies to control for the actual work experience of the individual. This has been available to researchers in survey questions with a more specific focus. These models have also been used in the context of panel data, where an individual is observed multiple times. This allows for standard errors to be clustered at the individual level, which may help with unobserved heterogeneity (Bozoyan and Wolbring 2011).

The inclusion of regional controls has been common in this field of literature for many years. These variables are included to control for the fact that different areas may have different wage or employment opportunities. Region can be controlled for in a couple of different ways, it is possible to use statistical regions as a control variable (Oaxaca 1973; Roback 1988; Beenstock and Felsenstein 2008). Some authors decide to just control for an urban regional split (Monastiriotis 2002). Likewise, it is common to control for ethnicity or country of birth in this labour market analysis. This is common practice as it is possible that some groups of individuals may be better or worse suited to the labour in that country. This can be controlled for using race variables (Oaxaca 1973; Heckman et al. 2000) or country of birth (Pendakur and Pendakur 1998).

The inclusion of personality traits in earnings and employment models has become increasingly popular as the personality data has become more available. The most commonly used measure of an individual's personality is called the big five personality traits. This set of variables includes measures of conscientiousness, extraversion, agreeableness, openness to experience and neuroticism and can be seen in numerous papers including (Heineck and Anger 2010; Barrick and Mount 1991; Nyhus and Pons 2005; Judge et al. 1999). All of the papers that include personality in the analysis of earnings or employment show that some personality types have better or worse labour market outcomes.

Heineck and Anger (2010), show that in Germany, individuals who have higher scores on the Agreeableness scale earn lower wages all else equal. Using American data, Seibert and Kramier (2001), showed that higher levels of extraversion are positively related to earnings and career satisfaction. The authors also showed that higher agreeableness levels

are negatively related to earnings. Muller and Plug (2006) showed very similar finding as Seibert and Kramier (2001) using a survey of graduates from Wisconsin high schools in 1957 who were resurveyed 35 years later. Semukina and Linz (2007) find evidence of personality differences in earnings in the Russian context. All of these studies mentioned above find some differences in how personality traits influence the earnings or employment of males and females.

It has become increasingly popular in labour economic analysis to control for the characteristics of the parents in an attempt to control for unobserved individual ability. The most common way that the existing literature includes parental controls is to include the highest level of parental education (Iannelli 2002; Blinder 1973; Dustmann 2004). Alternatively, a few authors have controlled for the wealth or income levels, which proxies for the opportunities an individual may receive such as (Hill and Duncan 1987) or size of the family (Kessler 1991).

It can be observed consistently among these studies that the background of the individual has an important role in determining the labour market success of the individual. As is expected those individuals whose parents are more highly educated, have higher income or fewer siblings have better labour market outcomes. This could be through innate ability, parental encouragement or having the ability to support an individual to achieve better labour market outcomes. As such, it is necessary to control for parental characteristics to avoid omitted variables bias, this is where one of the strengths of the HILDA dataset is very useful. Since all individuals inside the household complete the HILDA survey, I am able to observe characteristics of the individuals' parents when they are living together in one of the early waves. As such, I do not need to rely on retrospective questions from the individual on their parents' education or employment status. As such, it is likely the HILDA data records these parental controls more accurately than some other datasets.

3. Data

This chapter is broken up into the four following sections: first, I discuss the Household Income and Labour Dynamics in Australia (HILDA) dataset, which is used in the econometric analysis. Specific focus is placed on discussing the strengths and weakness of this dataset, to justify using the HILDA data in this thesis. Second, I explain how I created the sub-sample of 977 individuals who left their parents' home between the second wave and seventh wave of the HILDA survey. In this section, I also explain how I created the extended sample of individuals' who left home prior to the start of the HILDA survey, which is used in the robustness checks of the labour econometric analysis. Third, I discuss some descriptive statistics that show how the distributions of ages that males and females leave home vary. Fourth, I explain how I create the categorical home leaving age variables and how I measure the labour market and social outcomes of the individual.

3.1. Data Source

In this section, I first discuss the properties of the data which are used in this thesis and then provide a contextual background to explain why these properties make this a good dataset to use. The data used are sourced from the Household Income and Labour Dynamics in Australia (HILDA) survey. This survey is conducted by the Melbourne Institute of Applied Economic and Social Research¹¹. The HILDA survey began in 2001 and contacted approximately 12,000 households which were selected to be representative of the entire Australian population. Of the households contacted, 7,682 of these households either fully or partially responded, including 19,914 individuals (Wooden, 2002). Only individuals who are at least 15 years of age complete the individual sections of the survey, those under the age of 15 are only included in the household roster part of the survey. Each subsequent wave of the HILDA survey has been conducted annually¹². At the time of performing the econometric analysis of this thesis, data up until wave 11, which was conducted in 2011, has been

¹¹ Hereafter referred to as the Melbourne Institute.

¹² More information on the HILDA survey can be seen in publications from the Melbourne Institute such as; Watson and Wooden (2002, 2004a, 2004b, 2010, 2012), Wooden et al. (2002) and Wooden and Watson (2007).

released. Richardson (2013) notes that, the HILDA survey has been designed to continue into the foreseeable future.

The HILDA survey is an annual longitudinal survey that follows all individuals surveyed in the initial wave regardless of whether they continue to remain living within the same household. This method of tracking is used by many of the major panel surveys across the world including PSID (United States), BHPS (Great Britain) and GSOEP (Germany)¹³. The ability to track all individuals even after separating from the household head, allows the HILDA dataset to be used to examine transitions from the household. This could be examining how individuals are impacted after separation from a relationship or, as is examined in this thesis, the experience of children after the period of co-residence with their parents is completed. This feature of the HILDA survey can be exploited for many different research papers, when there are concerns about unobserved variables that may relate to the outcomes of individuals after separations.

In the following paragraphs, I discuss the strengths and limitations of the HILDA dataset to justify why I use it in this thesis. As already discussed above, the ability to track individuals after they are no longer co-residing with the household head is a vital aspect of the dataset which is useful for this analysis. The other strengths of the HILDA dataset are its size, annual nature, and comprehensive set of control variables that can be included in regression analysis, which can be sourced from the four distinct parts of the HILDA survey¹⁴.

One of the main strengths of the HILDA survey is the size of the dataset. The HILDA survey began with nearly 8000 responding households, thus, it would be expected that a significant number of these households would experience children leaving in the following waves. After completing the process of identifying if an individual left home prior to the start of waves two through seven, which is discussed in detail in the follow section, I am able to observe 977 individuals that left their parents' home. This sample size becomes large enough for statistical analysis to be performed with many control variables and separate analysis for males and females, which is common in labour economic analysis. This theory of separate economics models for males and females in labour economic analysis is developed and discussed in Oaxaca (1973). Along with the individuals who are observed leaving their

¹³ Examples of how this tracking method can be used include, Clark and Mulder (2010), Stone et al. (2014) & Dearden et al. (2006), Clark et al. (1997), for the PSID, BHPS and GSOEP respectively.

¹⁴ The four parts of the HILDA survey are; Household Form, Household Questionnaire, Personal Questionnaire and Self-Completion Questionnaire.

parents' home, the HILDA dataset also contains a set of retrospective questions relating to when all of the participants left their parents' home. This retrospective data becomes useful when performing the robustness checks on the econometric analysis.

The annual nature of this survey is useful in two ways for this analysis. First, this allows individuals to be observed co-residing with their parents' in one year, then no longer residing with their parents in the following wave of the survey. Thus, the ages the individuals leave home in this dataset will be more accurately recorded for the individual than if the survey was less frequent. Less frequent surveys such as censuses, seen in Yi et al. (1994), provide good population estimates on average home leaving age due to the large sample size. The process used to observe the individuals leaving their parents' home is discussed in detail in the sample creation section of this chapter. The second reason why the annual nature of the HILDA survey is useful is that a panel of labour market outcomes can be observed in a short period of time. This allows for panel analysis to be performed even though the HILDA survey only began in 2001. The process used to create the panel of outcomes is discussed in the sample creation section of this chapter.

The final major strength of the HILDA survey, that leads to HILDA being a good dataset to use in this thesis, are some of the control variables that can be included in the analysis that are not always available in labour economic analysis. The first of these variables which are useful to include in the econometric analysis are the personality control variables which are available in HILDA. The personality variables which are available in the dataset are conscientiousness, extraversion, agreeableness, openness to experience and neuroticism. Together these five characteristics form the big five personality traits. The inclusion of personality variables in labour economic analysis is a relatively recent development (seen in John and Thomsen 2014; and Heineck and Anger 2010). The other variables which can be included in the models that are not usually available in most other datasets are the parental and household controls of the household the child grew up in. These control variables provide an indication of the experience the youth had prior to leaving their parents' home, such as the wealth of the household as well as the interfamily relationships¹⁵.

However, there is one major limitation to using the HILDA dataset, which is the HILDA survey only began in 2001, as such there are only eleven waves of data which I can

¹⁵ These interfamily relationship questions are answered using zero to ten scales. For example how satisfied are you with your relationship with your parents? Zero being completely dissatisfied and ten being completely satisfied.

use for this analysis. However, this is not too much of a problem as I can use a rolling panel of outcomes, so including individuals who left their parents' home in wave two, their labour market outcomes will be included from wave five onwards. This process of creating the rolling panel of outcomes is discussed in detail in the following sections of this chapter. In balance, this weakness is only minor compared with the major strengths of the HILDA dataset.

The following paragraphs and figures are used to provide a contextual background for using the HILDA dataset to examine the impact the age an individual leaves their parents' home has on labour market outcomes. The Australian context where the HILDA survey is based has been relatively unaffected by the global financial crisis and the subsequent recession which has affected most other developed countries. The relatively strong economic position which Australia has experienced during the period of the HILDA survey can be seen in Figures 3.1 and 3.2 below. These two figures show that Australia has been growing at a faster rate and has had lower unemployment rates compared to the average of OECD countries during the period of the HILDA survey.

The strong stable economic position which Australia has experienced over the sample period is useful for the analysis performed in this thesis for a couple of reasons. The low levels of unemployment removes the concern that children may be continuing to live with their parents longer than they otherwise would as protection against unemployment. Although, if Australia wasn't in such a strong economic position, it may have caused children to leave their parents' home earlier than they otherwise would have wanted to, in search of employment in other regions of the country. Because of this, we can be more confident the choice that children make to leave their parents' home is not influenced by the economic position that Australia is experiencing.

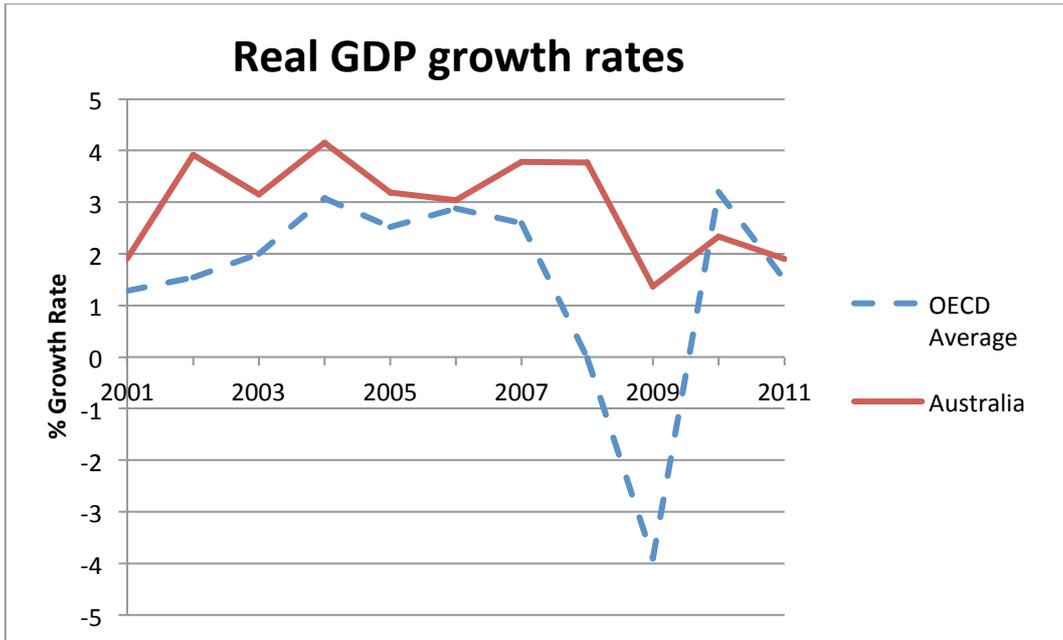


Figure 3.1: Source, World Bank (2013)

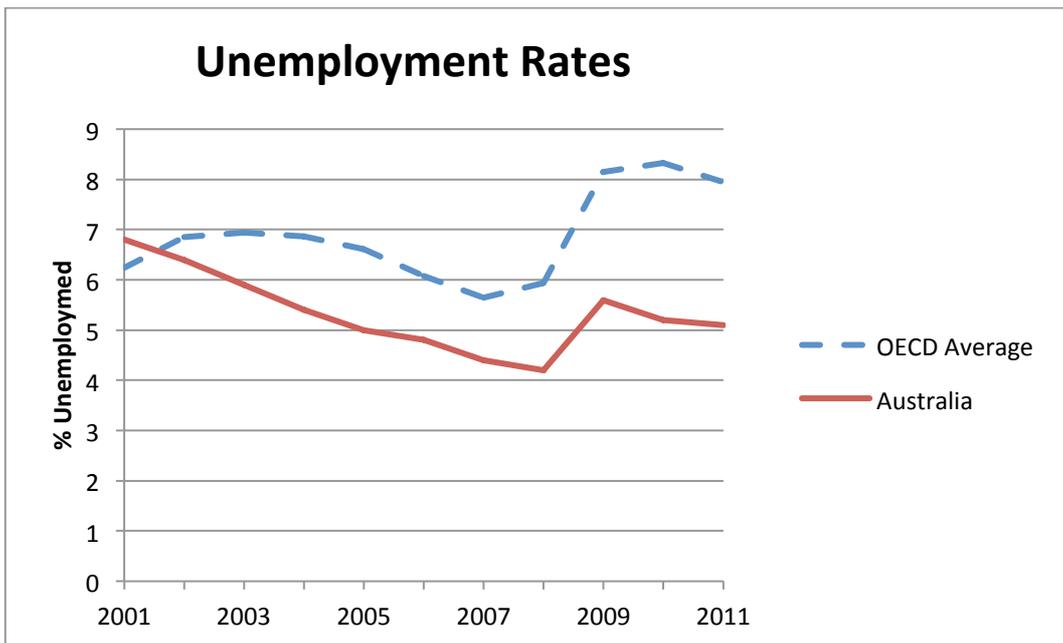


Figure 3.2: Source, World Bank (2013)

Australia's geography is rather unique, in that a large proportion of the population live in urban areas. This can be seen in McGuirk and Argent (2011), with over 86% of the population living in urban areas and over 54% of the population living in cities that have populations larger than 500,000 people. Since such a large proportion of the population lives

in urban areas and major cities, children may have the choice to remain living with their parents whilst they are attending university or polytechnic education. This is unique as in many other countries individuals have to leave their parents' home if they want to continue study after completing high school (such as Holdsworth (2000) for British children).

3.2. Sample Creation

In this section, I discuss how the sample of individuals who left their parents' home at some point between waves two and seven of the HILDA survey is created. I also identify the issues that arise when this method is used and how these issues are overcome. I first discuss the most important issue; the identification and treatment of individuals who may have already left their parents' home prior to the beginning of the HILDA survey, even though they co-resided with their parents during wave one. Then, I discuss how the sample of individuals used in the robustness checks is determined. This sample includes those individuals in the main sample who left their parents' home during waves two through seven, as well as individuals who had already left home prior to the start of the HILDA survey period. As is discussed later in this section, the limitations of these robustness checks include not knowing the type of relationship the child had with their parents' when they left home and knowing whether or not the individual grew up in an urban or regional area which affects the decision of the individual to leave home. Finally, there is a short explanation about how the panel of outcomes are observed for both the main sample and the sample used in the robustness checks.

Creating the sample of individuals who left their parents' home between waves two and seven of the HILDA survey involves observing the individual inside the parental home then, in a later wave, no longer co-residing with their parents. The following paragraphs explain in detail the processes which are used in the sub-sample creation and why I have chosen to use this method for the main econometric analysis in this thesis. Using this method of observing individuals both inside their parents' home and outside their parents' home allows for additional control variables to be included in the econometric analysis. These additional control variables are those which influence the individuals decision to leave their parents' home and these factors may also play a role in determining the labour market or social outcomes of the individual. These variables include, region prior to leaving home, as

this could influence the decision of the individual of when to leave home (see Mitchell et al. 1989; Buck and Scott 1993; Zhao et al. 1995; etc.). Other control variables that are available for inclusion in econometric models include measures of household wealth prior to leaving, household size and relationship with parents. The relationship the youth has with their parents may be important, as a poor relationship with their parents could drive children out of their parents' home earlier and a good relationship could lead to the child remaining at home for a longer period of time.

To begin the process of identifying who left home between waves two and seven of the HILDA survey, I first identified all individuals who had already left their parents' home prior to the first wave of the survey. These individuals are then excluded from the main econometric analysis, however, are re-examined when checking the robustness of the findings. The next step is for the individuals who have indicated they have never left their parents' home and thus still co-reside with one or both of their parents, the wave two data is merged with the wave one data. Then, I am able to identify if an individual moved out of their parents' home between waves one and two and separate them from those individuals who remained living with their parents when the second wave of the HILDA survey was being completed by the household. A total of 153 individuals were identified as having left their parents' home between wave one and wave two of the HILDA survey. This is only possible due to the HILDA datasets unique feature of tracking all individuals who are surveyed in the initial round of the survey, as opposed to only the household head¹⁶. Then, a check is made, to confirm that the age recorded for the individual leaving home is actually possible. This is done by confirming that the individuals' current age is either equal to, or one year older than the age which they left their parents' home.

The process of merging the data of individuals who remained living with their parents is then repeated using the third, fourth, fifth, sixth and seventh waves of data. This allows individuals who left prior to being surveyed in one of these waves, to be identified using the same process as is used above, which identifies the individuals who left prior to the start of the second wave of the HILDA survey. After the completion of this process, 977 individuals are observed to have left their parents' home at some point after the beginning of the HILDA survey and completion of the seventh wave of the of the HILDA survey. The decision to only include individuals that leave their parents' home before the start of the seventh wave, is to

¹⁶ This feature of the HILDA dataset is discussed in detail in the data source section of this thesis.

have a three year break between when they left home and when their labour market outcomes are examined, which is due to the findings in Ribar (2013), which have been discussed previously. The exclusion of the two waves immediately after leaving the parental home results in an unbalanced panel, as each individual is included based on the wave they were observed leaving their parents' home. However, this panel is able to observe the short-run labour market costs of leaving home as opposed to the transitional costs of leaving the parental home.

The next step, which is used in the creation of the subsample of individuals, is to examine the distribution of ages that the 977 individuals were observed leaving home between waves two and seven of the HILDA survey, to check to see if there are any outliers. The concern that exists is that, if an individual's age which they left home doesn't fit with the national trend, the individual may be different to the entire population on other levels and thus, should be excluded from the analysis. The other reason for creating an exclusion criterion is the concern that some individuals, who were living with their parents in wave 1, had left home at some point previously and misunderstood the questions in the HILDA survey. Specifically, the question of whether the individual had lived independently at some point in the past. In this case, the age that the individual left home recorded in the survey, is actually the age the individual left home for the second or later time. In both of these cases, it is prudent to exclude these individuals from the econometric analysis.

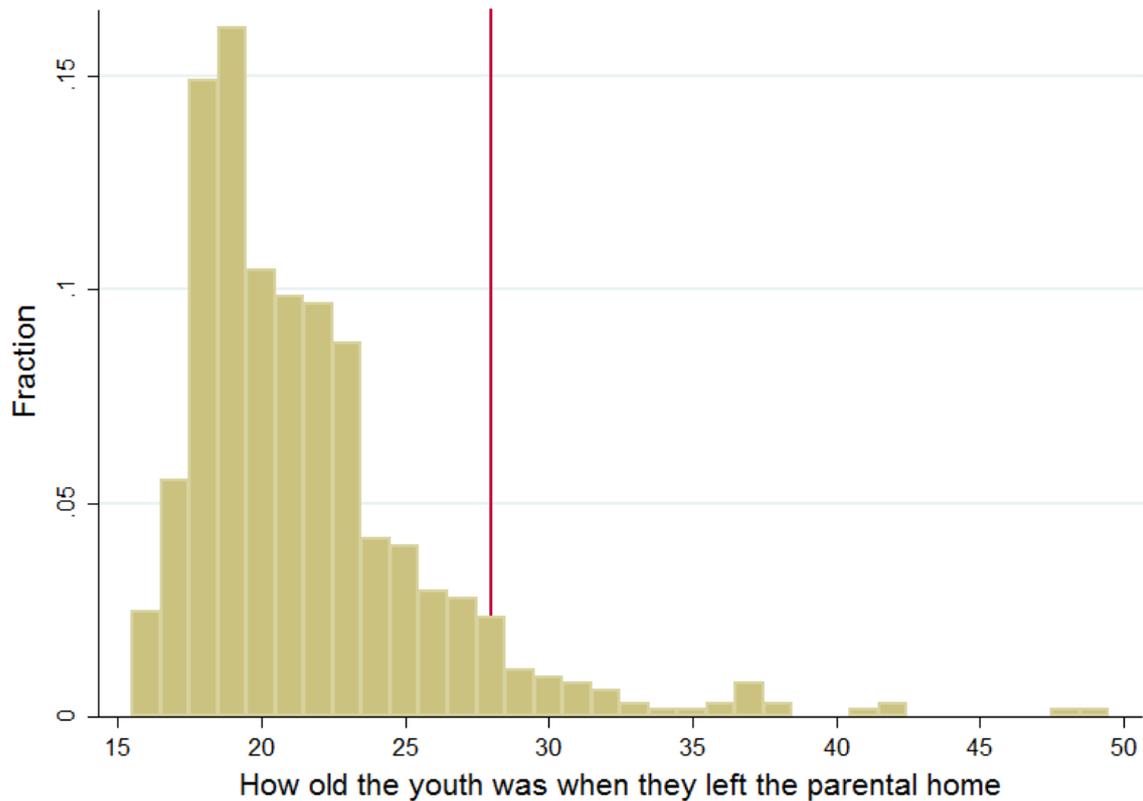


Figure 3.3: Distribution of ages all individuals left their parents’ home between wave 2 and wave 7 prior to outlier removal

The distribution of ages that individuals left their parents’ home is shown above in Figure 3.3. It is clearly seen that the distribution of ages that individuals leave home is positively skewed; this distribution is to be expected in the Australian context. This is due to the fact that the majority of the transitions between co-residence with parents and independent living occur in the few years immediately after the completion of high school (seen in Flatau et al. 2007). However, the length of the tail on this histogram is concerning, which may be due to inaccuracies of survey responses, or due to these individuals having completely different characteristics to the entire population as previously discussed, thus I have chosen to perform this analysis on a restricted sample. The age which I have chosen to be the upper limit of when an individual left their parents’ home is 28 years old; this is shown with the vertical line in Figure 3.3. This is chosen to be the restriction because it is the latest age when at least 2% of the observed individuals leave their parents’ home. By placing this additional restriction, the sample size is reduced from the 977 individuals who were observed leaving their parents’ home between waves two and seven of the HILDA survey to 918

individuals who left prior to their 29th birthday. This group is made up of 466 males and 452 females, which represents a fairly even gender split between the sexes in the sample.

The sample for the robustness tests is created by combining the sample discussed above, with individuals in the first wave of the HILDA survey, who left their parents' home aged 28 and younger and who are no older than 32 at the beginning of the HILDA survey. The distribution ages that these individuals left their parents' home can be seen in Figure 3.4 below. It can be seen that the individuals who are only included in the robustness sample leave home slightly younger than in the main sample. This is most likely due to the upward trend in the age Australian children leave home (Flatau et al. 2007). However, the distribution is still positively skewed which is to be expected. These restrictions that are made to form this sample are put in place for the same reasons as in the main sample, to alleviate the concern that the individuals who left home that late are different to the remainder of the population, or that the individual answered the question incorrectly, especially if they left home and then returned to live with their parents at some point in their life. Restricting the individuals' current age to be 32 or younger is to examine the short-run effects that the age the individual leaves home has on labour market outcomes.

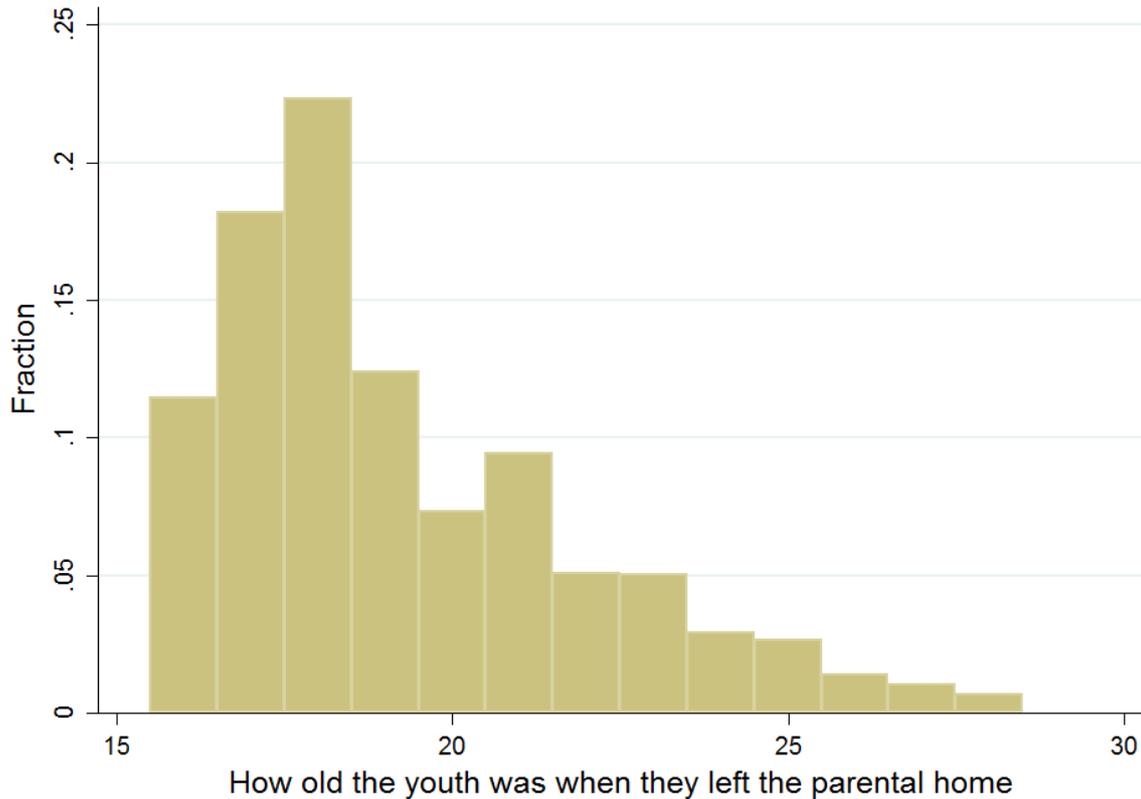


Figure 3.4: Distribution of ages individuals left home of those who left home prior to the first wave of the HILDA survey

In the following paragraphs, I discuss how the panel of labour market and social outcomes is created. The labour market outcomes that are examined in the regression analysis are an individual’s hourly wage rate¹⁷ and employment status. These are the commonly used labour market outcomes and are used in the vast majority of labour economic papers (see Heckman et al. 2006; Boras et al. 1997; Friedberg 2001). The use of these variables has been discussed in detail in the Literature Review. The first social outcome of the individual that I examine is whether or not the individual has a partner; this can be either being married or de-facto relationships. The second social outcome examined is whether or not the individual completed education beyond the final year of high school; this can be in the form of a trade certificate to a university degree.

There are a couple of restrictions which need to be made to ensure that I analyse the effect that the age individuals leave their parents’ home has on the short-run labour market

¹⁷ For the econometric analysis the log of hourly wage is used so that the coefficients estimate the percentage effect of the independent variable on hourly wage.

outcomes. The first of these restrictions is to allow the individual at least three years between the time they left their parents' home and when their labour market outcomes are first included in the analysis. The reason for deciding to have this period where the labour market outcomes are excluded from the analysis is due to the findings in Ribar (2013). As has been discussed previously, Ribar (2013) examines the financial hardships individuals experience in the years post leaving their parents' home. In this study, Ribar (2013) observes that the individual is more likely to experience financial hardship for the three years immediately after leaving their parents' home. To avoid this adjustment process having an impact on the regression results, there is a three year gap in-between the time when the last individual left their parents' home and when the first wave of labour market outcomes is analysed.

Second, I place a restriction on the age of the individual during the outcome period. For the main analysis the individuals are between the ages of 25 and 34 as most individuals have completely entered the workforce by these ages. The upper limit of the age range is chosen so that the individuals included in the analysis are at a similar stage of their career path. Therefore, it is still the short-run labour market effect of leaving home that is being examined. When performing the robustness analysis on the sample, which includes the individuals who left home prior to the start of the HILDA survey, the age range is extended to 25-40 years old. These same restrictions are made to the sample when I examine the social outcomes to be consistent and this also means the individuals are more likely to have completed their education.

The labour market and social outcomes examined form an unbalanced panel for a couple of reasons. First, these outcomes are only included from 3 years after the individual left their parents' home and I observe individuals leaving prior to all waves of the HILDA survey between two and seven. Therefore, people who left their parents' home prior to the start of the second wave are included in the outcome sample from wave five onwards. If the individual is observed being first out of their parents' home in the third wave of the HILDA survey, their outcomes are included from the sixth wave onwards. This is continued for the individuals that are observed at the first point outside their parents' home in the fourth, fifth, sixth and seventh waves. For the individuals who left their parents' home prior to the start of the seventh wave, their labour market and social outcomes are only included in the outcome panel in waves ten and eleven.

The second reason why the panel of outcomes is unbalanced is due to the fact that response rates of the HILDA survey are not 100%. However, the HILDA survey places a lot of emphasis on tracking individuals and surveying as many of them as is possible. Even so, some individuals are unable to be surveyed for a wave or two and are then resurveyed in a later wave and some individuals completely drop out of the HILDA survey and are never resurveyed. However, this is not too much of an issue as the statistical analysis is able to overcome the issue of the unbalanced panel; these statistical methods are discussed in detail in the methodology chapter.

3.3. Descriptive Statistics

The third section of the data chapter presents the detailed descriptive statistics of the sample of individuals who left their parents' home at some point between the second and seventh waves of the HILDA survey. The descriptive statistics presented in this chapter include the distribution of ages that individuals left home by gender. I also present descriptive statistics of the sample of individuals who are only included in the robustness check, i.e. those individuals who left home prior to the first wave of the HILDA survey and are younger than 32. In this section, I also present some descriptive tables that indicate what effect the region the individual grew up in has on the age that the individual decides to leave their parents' home. This is followed with descriptive statistics about how far away from their parents' home the individual decides to move. This is examined by the age that individual leaves their parents' home and by the region the individual grew up in.

First, I show the difference in the ages that the individuals in the sample chose to leave their parents' home, by gender. The differences can be seen in the histograms below in Figure 3.5 and the corresponding statistics in Table 3.1 below. These show that there are small differences in the distribution of ages that males and females choose to leave their parents' home. The mean age that females and males chose to leave their parents' home in this sample is 20.5 years old and 21.1 years old, respectively. Whereas, the median age that females leave their parents' home is 20 years old compared to 21 years old for males¹⁸, these median ages are illustrated with the vertical lines in Figure 3.5 below. However, the

¹⁸ Even though the median age of leaving home for males is 21 years old, 49% in this sample leave home at the age of 20 years old or younger.

distributions of ages that males and females leave home have similar characteristics, both of these distributions are positively skewed with long tails. The positive skewedness is to be expected when examining the age individuals leave home, due to a large proportion choosing to leave their parents' home in the years after finishing school and the remaining individuals drift out of their parents' home slowly. Thus, it is unsurprising that the two largest peaks for both males and females are individuals who leave their parents' home at either 18 or 19 years old.

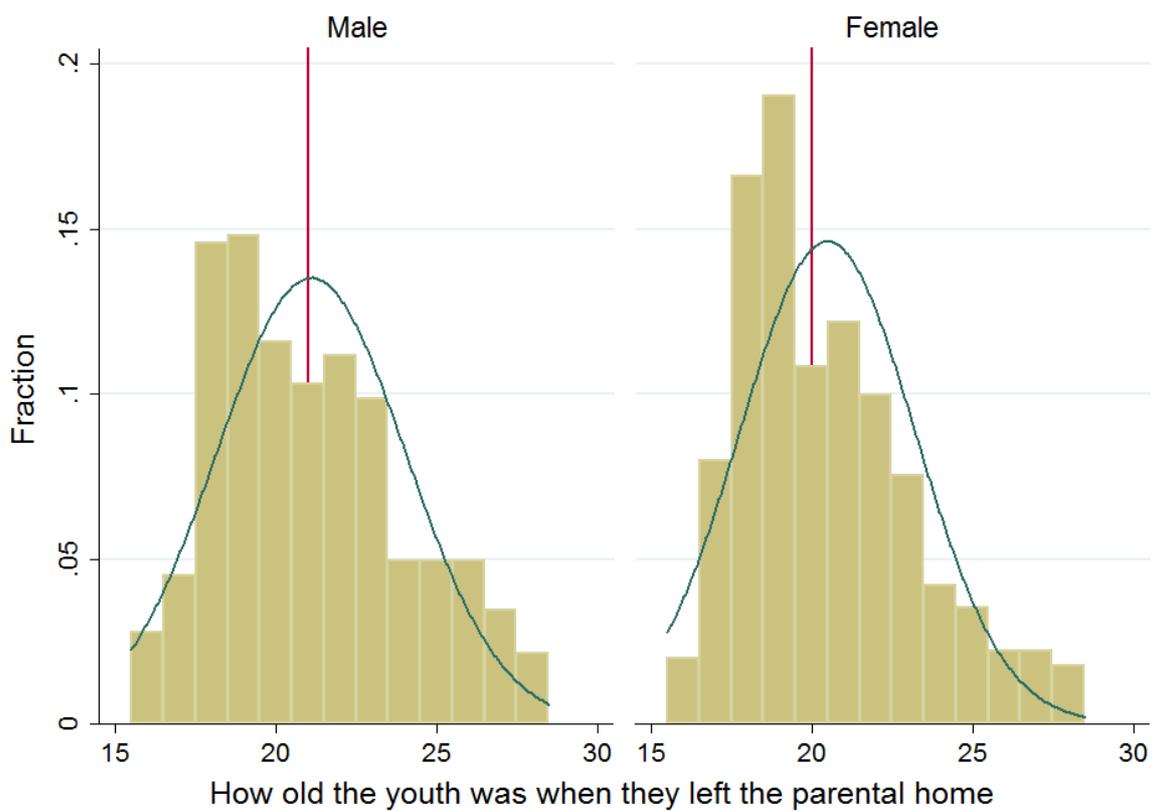


Figure 3.5: Distribution of age that individuals left their parents' home by sex, for individuals who are observed to have left home between the 2nd and 7th wave of the HILDA survey.

Table 3.1: Summary statistics of age individuals left home

	Main Sample		Robustness Sample	
	Male	Female	Male	Female
10 th Percentile	18	18	17	16
25 th Percentile	19	18	18	17
Median	21	20	19	19
75 th Percentile	23	22	22	21
90 th Percentile	26	24	24	23
Mean	21.09	20.48	19.99	19.37
Standard Deviation	2.95	2.72	2.96	2.67

Source: HILDA. Main sample statistics calculated on the 466 Males and 452 Females who left their parents' home after the first wave of the HILDA survey and prior to the seventh wave of the HILDA survey. Robustness sample includes these individuals as well as individuals younger than 32 in the first wave of the HILDA survey who left their parents' home aged 28 years or younger. The robustness sample includes 1563 Males and 1851 Females.

The distribution of ages included in the robustness sample can be seen in Figure 3.6 below and in the statistics in the corresponding columns in Table 3.1 above. It can be seen that the median age that individuals left home the robustness test dataset is one year younger for both males and females. This is most likely due to the upward trend in the ages that the recent cohorts have been leaving home in Australia, described in Flatau et al. (2007)¹⁹. There are a couple of other possible explanations for the differences in the ages that males and females left home in the main sample compared to the robustness sample. First, there are still some individuals included in the main sample that left their parents' home and then returned prior to the start of the HILDA survey and misunderstood the question in the first wave. For these individuals, the recorded value will be the age they left their parents' home the second or third time. However, there is no way to observe these individuals and exclude them from the analysis. The second possible explanation for the difference in the distribution of the main sample and robustness sample is how the HILDA survey codes the ages that individuals left their parents' home. In the HILDA dataset, it is assumed that the individual left their parents' home at their current age if they moved out of home in the last year. However, this will overestimate the average age as some people will have left home before their birthday.

Although, the median and mean ages that individuals leave their parents' home are younger in the robustness test sample, the distribution of home leaving ages are very similar in the main sample and the robustness sample. The positive skewedness is evident for both males and females in both cases, with high peaks around the time individuals' finished

¹⁹ This upward trend is displayed graphically by Figure 2.1 (page 13) in the literature review chapter.

schooling. The similarities in the distributions between the two samples suggest that the sample which has been created for this analysis is close to being representative of the entire population.

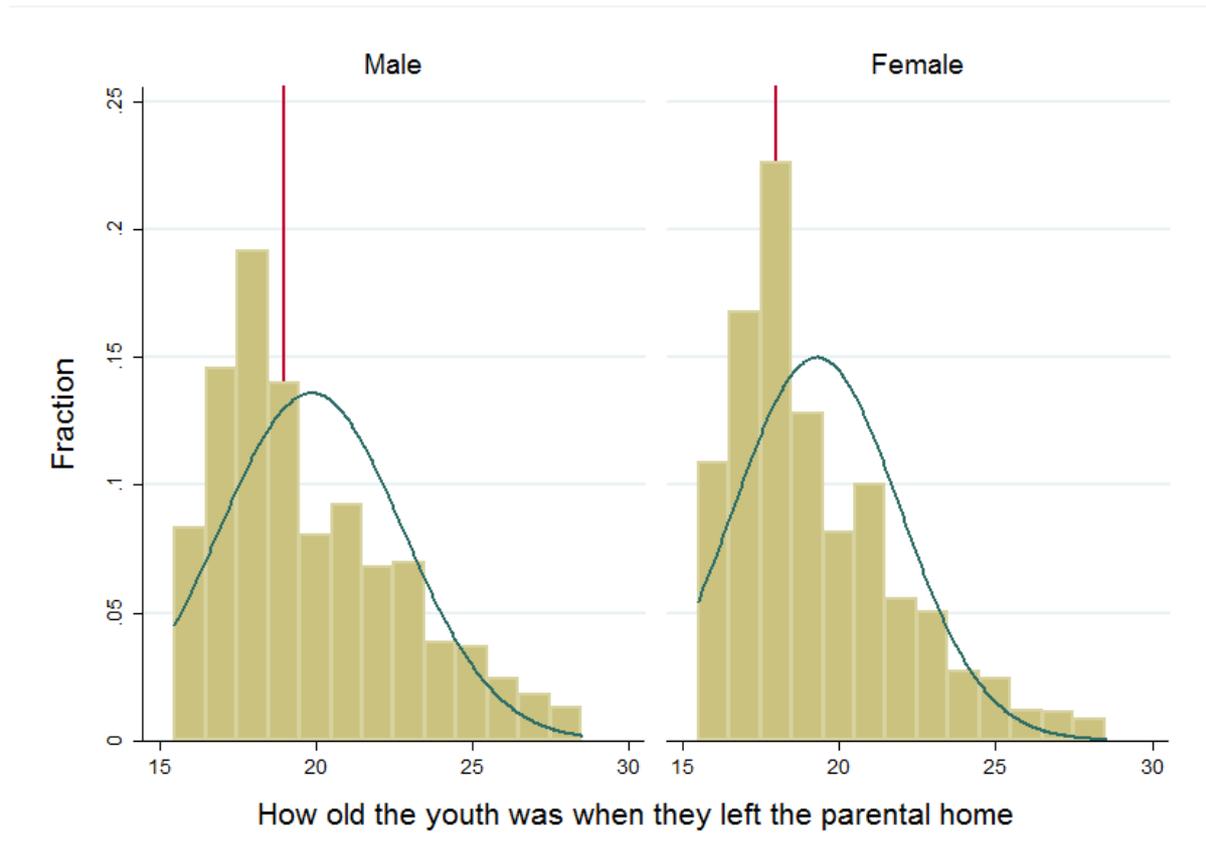


Figure 3.6: Distribution of age that individuals left their parents’ home by sex, for all individuals in robustness sample

The next set of statistics which are important to examine, are whether or not the region that the individual grew up in has an impact on the age in which they decide to leave their parents’ home. In Table 3.2 below, it is clear to see that there is a large amount of variation in the average age that individuals leave their parents’ home, both by Major Statistical Region and by Remoteness of location. This table shows that children who grew up in a major Australian city tend to leave their parents’ home later than those who grew up elsewhere. Due to the relatively small number of individuals I observe leaving home I have combined a couple of the statistical regions together. This table also suggests that individuals

who grew up in Inner Regional Australia, Outer Regional Australia and Remote Australia leave home at younger ages than those individuals who grew up in a major Australian city.

Table 3.2: Summary statistics of when individuals left their parental home by location

	Male		Female	
	Proportion	Mean age	Proportion	Mean age
Statistical region prior to leaving home				
Sydney	13.30%	22.56	16.59%	21.75
Balance of NSW & ACT	19.10%	20.13	17.92%	20.11
Melbourne	13.30%	22.84	14.82%	21.72
Balance of VIC & TAS	10.30%	20.38	9.96%	19.87
Brisbane	7.51%	21.46	7.74%	19.86
Balance of QLD & NT	17.17%	19.76	11.95%	19.41
South Australia	10.52%	20.91	11.06%	19.40
Western Australia	8.80%	21.58	9.96%	20.78
Remoteness area prior to leaving home				
Major City	53.00%	22.16	56.86%	21.16
Inner Regional Australia	29.83%	19.96	26.11%	19.80
Outer Regional Australia & Remote	17.17%	19.74	17.03%	19.25
Australia		21.09		20.48

Source: HILDA. Statistics are calculated on the 466 Males and 452 Females who left their parents' home after the first wave of the HILDA survey and prior to the seventh wave of the HILDA survey.

Table 3.2 above confirms that the pattern observed in the histograms of females leaving their parents' home at a younger age than males, this is something that occurs in most regions across Australia. This is seen in the remoteness region panel of Table 3.2, where the average age that females leave home is younger than the average age that males leave home, for all three remoteness regions. However, these differences are not large in magnitude and are not statistically significant. Examining how the age that males and females leave home differs by major statistical region, it can be seen that for the majority of the statistical regions of Australia, females leave home slightly younger than males. Although, this difference is driven by the difference in age that males and females who grew up in major Australian cities leave home. There is no observed difference in the ages that males and females who grew up in remote or very remote parts of Australia leave home.

Next, it is useful to examine how individuals of different ages participated in later waves of the survey, as well as how many of the individuals moved into a different statistical region after leaving their parents' home. Table 3.3 below examined this participation in the later rounds of the HILDA survey, by the age that the individual chose to leave their parents' home. There are several interesting observations that can be seen in Table 3.3 below. First, just over 23% of the entire sample moved major statistical region after they left home. However, there is a large amount of variation in the likelihood an individual moves statistical region when they leave home depending on the age they left home. Individuals who left younger are the most likely to move statistical region after leaving their parents' home. However, if the individual left home at a later age, the individual is more likely to remain living in the same statistical region as they grew up in with their parents.

The other feature to note in Table 3.3 below is the vast variation in the participation of individuals in the later waves of the HILDA survey and how this varies by age. It can be seen in the fourth column of this table that, 12% of the individuals who were observed leaving their parents' home between waves two and seven, never participated in the HILDA survey in the outcome panel²⁰. The likelihood of later participation in the HILDA survey appears to have very little correlation with the age that the individual decided to leave their parents' home. Whereas, the probability of ever being observed in paid employment appears to vary with the age an individual left. Although there are some exceptions, the general trend is that individuals who left their parents' home later, are more likely to be employed and less likely to not participate in any of the later rounds of the HILDA survey. This is likely because these individuals are older when we observe their labour market outcomes than individuals who left at younger ages, hence the need for a regression analysis which can account for this. The remaining 12% of the individuals who are observed leaving their parents' home between waves two and seven, are either unemployed or not in the labour force.

²⁰ Note that the length of outcome panel depends on the wave at which the individual was first observed outside their parents' home.

Table 3.3: Summary statistics of participation by age and gender

	% of sample	% who moved MSR	% employed in panel	% missing from panel
By home leaving age				
16	2.40%	13.64%	54.55%	13.64%
17	6.21%	21.05%	57.89%	8.77%
18	15.58%	36.36%	76.92%	7.69%
19	16.88%	30.97%	77.42%	9.03%
20	11.22%	19.42%	72.82%	15.53%
21	11.22%	21.36%	74.76%	17.48%
22	10.57%	21.65%	74.23%	14.43%
23	8.71%	27.50%	82.50%	12.50%
24	4.58%	16.67%	69.05%	16.67%
25	4.25%	5.13%	76.92%	10.26%
26	3.59%	9.09%	75.76%	15.15%
27	2.83%	3.85%	69.23%	19.23%
28	1.96%	1.11%	83.33%	11.11%
Panel B: By gender				
Male	50.76%	25.54%	77.04%	14.17%
Female	49.24%	21.24%	71.68%	10.62%
Total	100.00%	23.42%	74.29%	12.42%

Source: HILDA. Statistics are calculated on the 466 Males and 452 Females who left their parents' home after the first wave of the HILDA survey and prior to the seventh wave of the HILDA survey. % who moved MSR, is the percentage of the individuals by age and gender that were observed leaving home that moved statistical region. The percentage of individuals employed and non-respondents are calculated based on the number of individuals that were observed leaving their parents' home by age and gender. Missing from and employed in panel are where the individual is in paid employment in the outcome period which depends on when the individual left home, which has been discussed previously.

Table 3.4 below also examines the participation of individuals in the later waves of the survey as is done in Table 3.3; however, this table examines the later participations by the region the individual grew up in. First, it can be noted that there is very little variation in the participation and employment status for the different regions that the individual grew up in. The other major observation which can be made from this table is that individuals who grew up in a major Australian city are less likely to move major statistical region than those individuals who grew up outside a major Australian city.

Table 3.4: Summary statistics of participation by region the individual grew up.

Statistical region prior to leaving home	% of sample	% who moved MSR	% employed in panel	% missing from panel
By Major Statistical Region				
Sydney	14.92%	10.22%	72.99%	13.14%
Balance of NSW & ACT	18.52%	37.06%	72.35%	13.53%
Melbourne	14.05%	10.85%	71.32%	18.60%
Balance of VIC & TAS	10.13%	30.11%	77.42%	10.75%
Brisbane	7.63%	12.86%	77.14%	7.14%
Balance of QLD & NT	14.60%	30.60%	81.34%	7.46%
South Australia	10.78%	32.32%	69.70%	10.10%
Western Australia	9.37%	16.28%	73.26%	16.28%
By Remoteness of Location				
Major City	54.90%	15.48%	72.82%	14.68%
Inner Regional Australia	28.00%	31.91%	77.04%	9.34%
Outer Regional Australia & Remote	17.10%	35.03%	74.52%	10.19%
Australia	100.00%	23.42%	74.29%	12.42%

Source: HILDA. Statistics are calculated on the 466 Males and 452 Females who left their parents' home after the first wave of the HILDA survey and prior to the seventh wave of the HILDA survey. % who moved MSR, is the percentage of the individuals by age and gender that were observed leaving home that moved statistical region. The percentage of individuals employed and non-respondents are calculated based on the number of individuals that were observed leaving their parents' home by age and gender. Missing from and employed in panel are where the individual is in paid employment in the outcome period which depends on when the individual left home, which has been discussed previously.

In this section, I have presented summary statistics that show how the distribution of ages that male and females leave home differ. I have also presented some descriptive statistics on what effect region has on home leaving age. However, I examine this further using regression analysis as there may be other factors causing the difference in home leaving ages by region. Finally, I provide some descriptive statistics examining whether or not participation in later waves of the HILDA survey is influenced by the age an individual leaves home or the region they grew up in.

3.4. Defining key variables

In this section, I first discuss how I transform the observed age individuals leave their parents' home from a continuous variable into categorical variables. I create two categorical

measures, first, a zero/one dummy that splits individuals into groups of young leavers and old leavers. The second categorical variable splits these leavers into four groups based on leaving at different life stages. In the second half of this section, I discuss how the outcome variables, hourly wage rate, employment status, marital status and educational achievement are measured and the transformations which are made to these variables so that panel analysis can be performed.

It is useful to create these categorical variables to analyse the impact that the age that children leave home has on labour market outcomes, as the impact may not be a linear trend. It may be that leaving home relatively young or old age compared to the average age that the rest of the cohort leaves home will influence the labour market outcomes. Or it could be that leaving home at different life stages plays an important role in the labour market outcomes. This is why I create these two variables to analyse these possible effects.

The first step in identifying how the individuals should be separated into groups is to recall the distribution of ages that individuals left their parents' home. This distribution of ages that males and females left their parents' home has been discussed in detail in the previous sections and the histograms of these distributions can be seen in Figure 3.7 below. It can be seen that the median age that males leave home is 21 compared to the median age females leave home of 20 years old. The corresponding mean ages that males and females leave their parents' home are 21.1 and 20.5 respectively. The first of the categorical variables created is a zero/one dummy variable which splits the sample into two groups. Then, all that needs to be completed is choosing the cut off age that determines which group the individual fits into.



Figure 3.7: Distribution of age that individuals left their parents' home by sex, for individuals who are observed to have left home between the 2nd and 7th wave of the HILDA survey.

The first categorical variable that I create is a zero/one dummy variable that splits the sample into young leavers and old leavers. The HILDA survey only records the age that individuals leave their parents' home at the yearly level, which is common but makes separating the individuals into two even sized groups somewhat difficult. It is a fairly clear choice to make the female cut off age 20, which is the median age that females leave their parents' home. When making this restriction, 56% percent of the population leaves at 20 years old or younger, resulting in two relatively even sized groups for females. There are two options available for the cut off age that is selected for males, first, using the median age of leaving home which is 21 years old. Second, the same cut off age as is used for the female young leavers could be chosen. Both of these options have strengths and weaknesses however, I have chosen to use 20 years old as the cut-off for males to be young leavers for one main reason, to keep the number of young leavers and old leavers relatively even. When 20 years old is chosen as the upper age limit, 49% of the population are young leavers whereas, nearly 60% of the population are young leavers when 21 years old is chosen for the

upper limit. Figure 3.8 below shows the proportion of males and females that fit into the younger and older categories, based on when they left their parents' home.

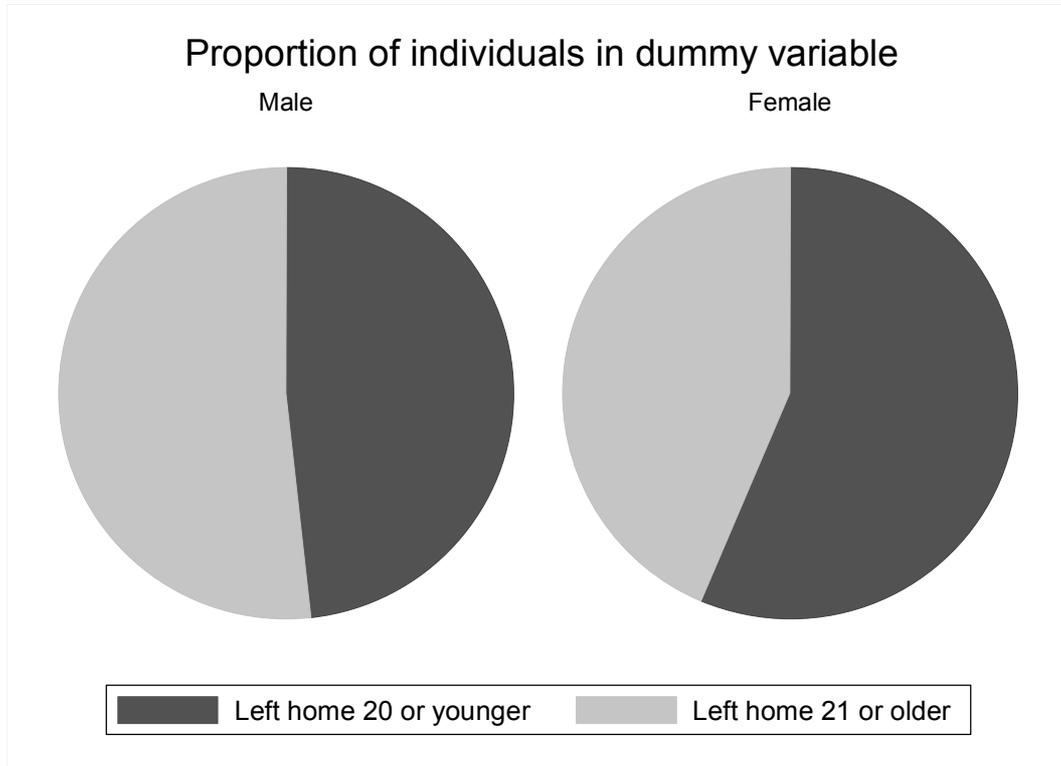


Figure 3.8: Source HILDA, proportion of individuals who fit into each of the dummy categories main sample only

Figure 3.9 below shows, how individuals in the robustness sample are distributed between the younger leavers and old leavers groups. It can be seen that a much larger proportion of these individuals are in the younger leavers group in the robustness sample. This may be explained by the recent upwards trend in the ages Australian children decide to leave their parents' home, which has been identified in Flatau et al. (2007). However, it is reassuring to observe that females have a larger proportion of individuals than males have in the younger group; this is consistent with the trend that females choose to leave their parents' home at younger ages than males.

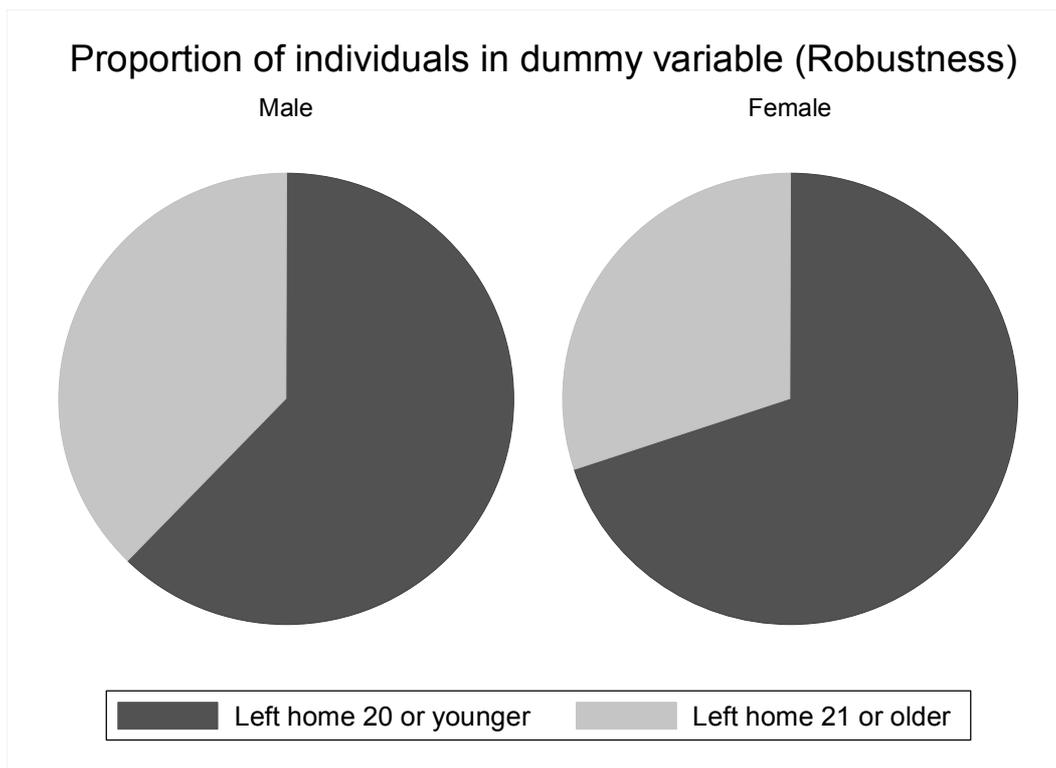


Figure 3.9: Source HILDA, proportion of individuals who fit into each of the dummy categories robustness sample

The second categorical variable that I create splits individuals into four categories relative to life points. The first group of individuals are those who left their parents' home between 15 and 18 years of age. The individuals which fit into this group can be defined as the young leavers, meaning that they leave their parents' home prior to the completion of high school education or immediately after completing high school. The second group of individuals are those who leave their parents' home during the standard transition period from co-residence to independent living. The ages that these individuals leave their parents' home are 19 and 20, which are the large spikes in the histograms in Figure 3.7 above. These individuals are leaving home after the completion of high school and may be moving out of their parents' home to continue education or for independence.

The third group of individuals are those individuals who left their parents' home between 21 and 22 years old. These individuals can be described as people who chose to stay co-residing with their parents later than the average of the individuals in the sample. These individuals are those who have waited until the completion of their education which may be university, polytechnic or a trade qualification before leaving their parents' home. The final

group of individuals are those who left their parents' home between 23 and 28 years old. This group of individuals can be described as being very slow in the transition from co-residence to independent living.

Figures 3.10 and 3.11 below show how the individuals in the two samples are distributed among the four different groups that I describe above. From these Figures below, I observe that the individuals who left home at the ages of 21 and 22 form the smallest group of individuals and this is consistent for both males and females. It is interesting to note that the proportion of females who left between the ages of 15 and 18, and 19 and 20 are higher for females than for males. This is to be expected, given that the sample of females has lower median and mean home leaving age than the sample of males. Therefore, the proportion of men that leave home in the extreme late group is larger than the proportion of females who leave in the extreme late group, this must be the case since both proportions must sum to one.

When I compare how individuals are distributed into these groups for the main sample and the robustness sample, I observe the same trend as is present for the dummy variable. This trend shows that there are more individuals in the younger groups than in the older groups for the following reasons that have already been discussed such as; misunderstanding the original question and the general upward trend in the ages that children leave their parents' home. However, it is reassuring to observe that the proportion of females in the younger groups is greater than the proportion of males in the younger groups, which is consistent with the trends of females leaving home younger than males.

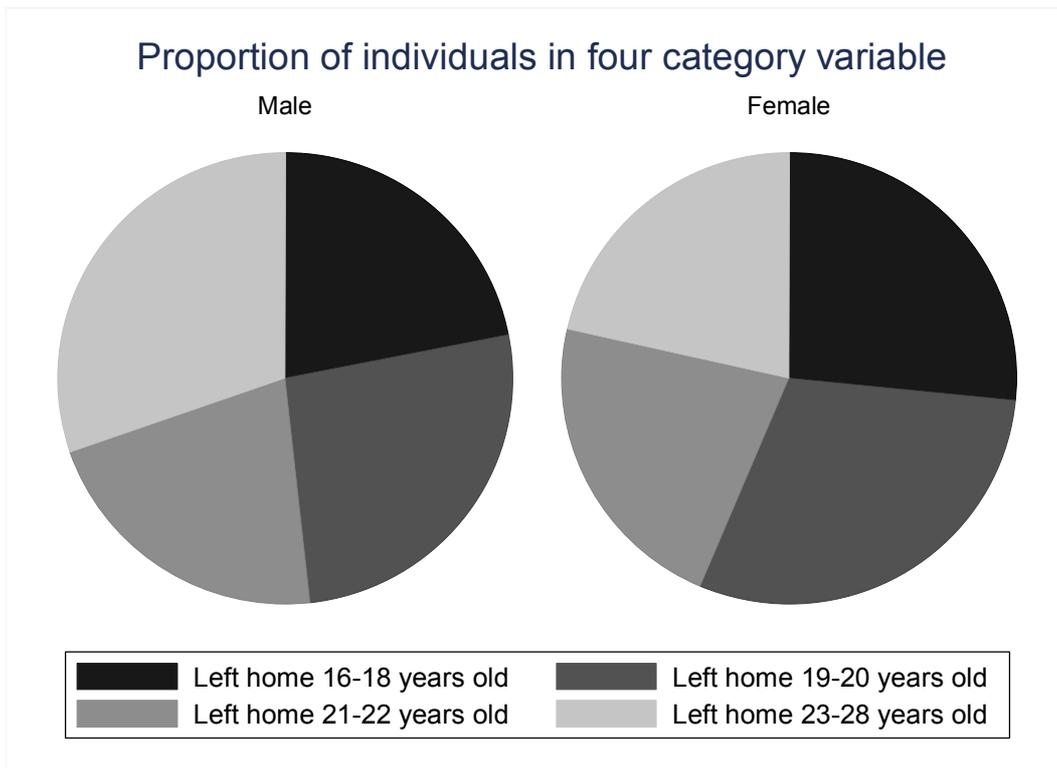


Figure 3.10: Source HILDA, proportion of individuals who fit into each of the four categories main sample only

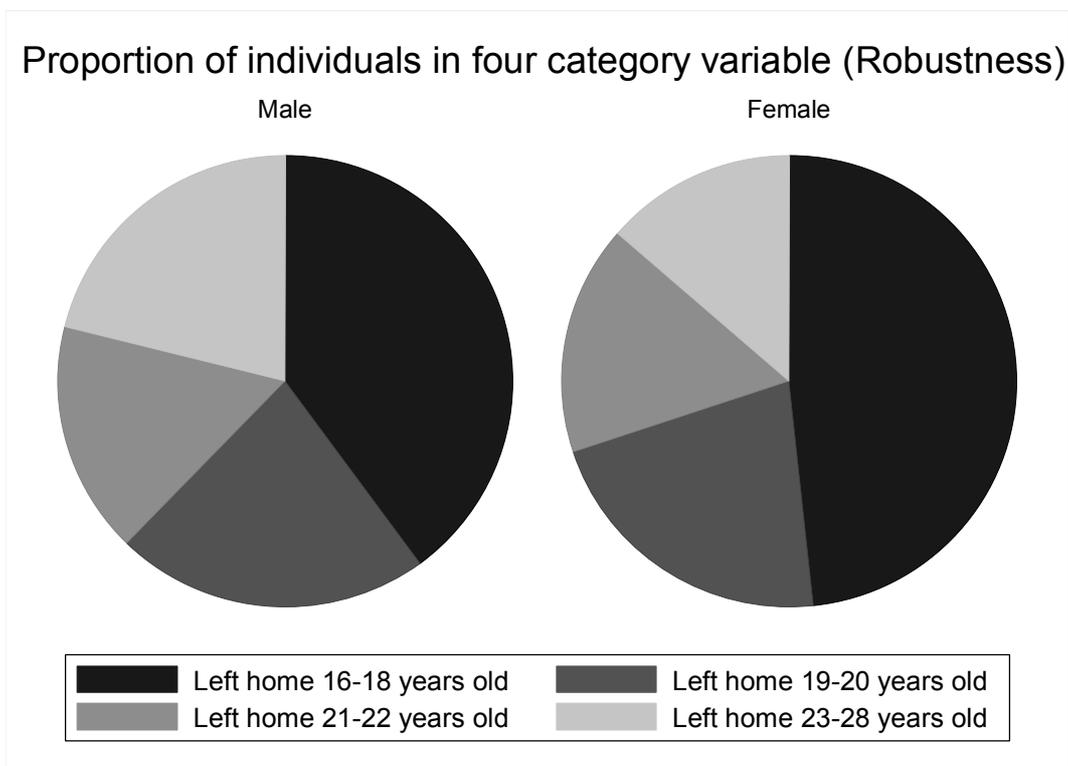


Figure 3.11: Source HILDA, proportion of individuals who fit into each of the four categories robustness sample

In the second half of this section, I describe the outcome variables which are used in the econometric analysis; employment status, hourly wage rate, coupling and educational achievement. I include explanations of why these outcomes are used, to examine whether leaving home age impacts labour market or social outcomes of the individual. The use of these two labour market outcomes is well established in labour economics, which has been discussed previously in the literature review. Finally, I explain the transformations which are made to the hourly wage variable in the outcome panel to create real hourly wage, which allows wages from different years to be compared in the same econometric model.

The first outcome created is used to examine whether the age individuals leave their parents' home has any impact on the likelihood of being in paid employment. This outcome is a zero/one dummy variable indicating whether the individual is in paid employment at the time of being surveyed. I do not worry about whether the individual is in full or part-time employment, as this is a choice that the individuals make and is often determined by factors outside the econometric model. This outcome is easy to compare across years because it is only a zero/one dummy indicating the employment status. The proportion of individuals in paid employment can be seen below in Table 3.5. These proportions are high but not unexpected given the young age of the sample. For example, Ribar (2013) observes 93% of men and 87% of women are employed full time three years after leaving home. The employment outcome I examine in the labour market analysis is any paid employment full, or part-time, which is why the proportion of individuals employed is slightly higher than in Ribar (2013).

Table 3.5: Summary of outcome variables

	Female		Male	
	Mean	Std. Dev.	Mean	Std. Dev.
Employed	0.932	0.252	0.957	0.202
Logged Real Wage	3.210	0.355	3.254	0.416
Real wage	26.47	10.61	28.28	13.09
Married	0.623	0.485	0.591	0.492
Further education	0.716	0.451	0.661	0.473

Source: HILDA, statistics based on the observed outcomes of the main sample of individuals

The second outcome created is used to examine whether the age individuals leave their parents' home influences their earning potential. The outcome variable which I use here is hourly wage rate; this value is derived from the survey data in the Personal Questionnaire, specifically the answers on the number of hour's worked and total earnings of the individual in the previous week. This creates a variable that measures the average hourly earnings of the individual per hour. Since the panel of outcomes I am interested in are across seven waves of data from 2005 through to 2011, I convert these hourly wage rates into real hour wages using 2008 as the base year. This is done using the Australian CPI values sourced from ABS (2012) as the inflation rate.

The econometric models use the logged value of the real hourly wage rate, as has been discussed in the literature review. Using logged real wage rates makes the distribution of the outcome variable more normally distributed than if I just use real hourly wage rate, this can be seen in Figure 3.12 below. The other major advantage of using logged real wage rate is that the interpretations of the coefficients become more intuitive. When examining the variables which are measured in levels such as education, the coefficient represents the approximate percentage increase in wage rate of having a given of level of education (university degree) compared to the base level (did not complete high school). The interpretation of continuous variables such as years of work experience is the percentage increase in wage rate for each additional year of work experience, holding all other factors constant.

Distribution of Hourly Wage Rates

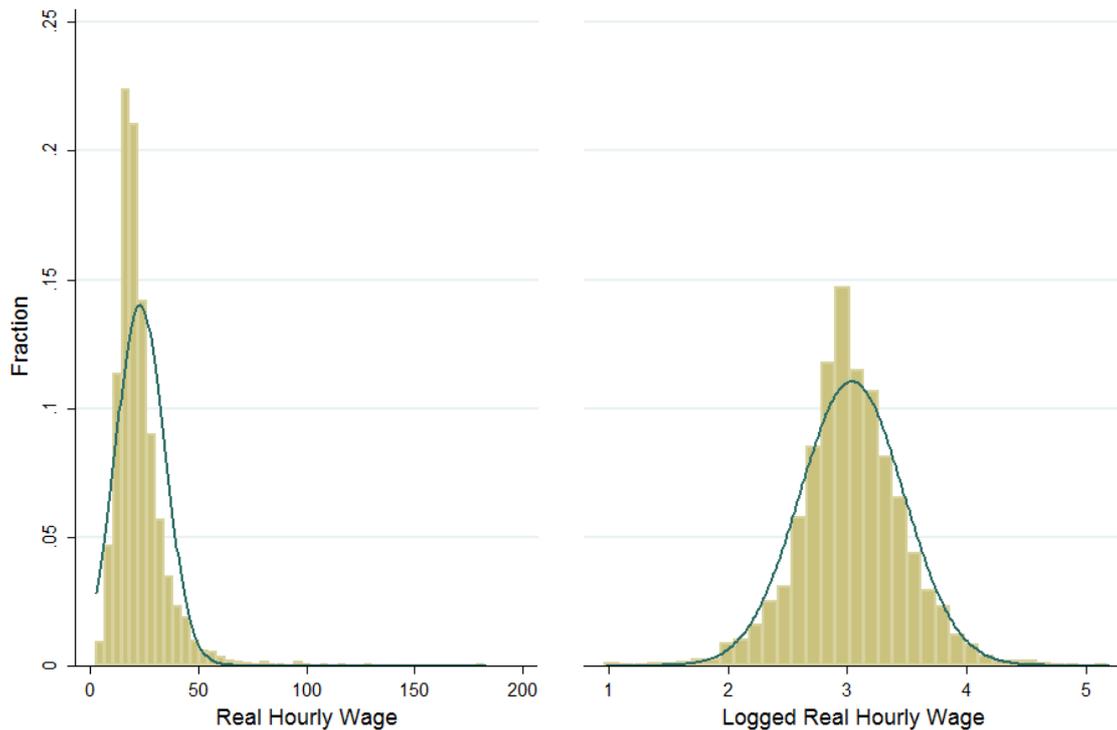


Figure 3.12: Distribution of real hourly wage rates for main sample

The third outcome which is examined is the likelihood of being in a relationship, which can be either married or in a de-facto relationship. I have chosen to examine this coupling variable for a couple of reasons. First, the choice to marry can be influenced by numerous factors, which cannot be controlled for in the model. Second, marriage is becoming less common as partners in de-facto relationships have the same rights as married partners. This coupling variable is a zero/one dummy variable like the employment status variable, thus is very easy to compare across years in the outcome panel. The proportion of males and females who have a partner by this definition in the outcome panel can be seen in Table 3.5 above.

The fourth outcome which I examine in this thesis is examining whether the age an individual leaves home has any influence on the educational achievement of the individual. I have chosen to examine the likelihood of completing education beyond high school level, because this shows that the individual is determined to obtain extra skills for better employment opportunities. However, this is not influenced by the type of education which

the individual is best suited to, practical for trade certificates or more theoretical for those individuals who attend university. As is the case with the employment and coupling variables discussed above, this is a zero/one dummy variable, thus all waves of the outcome panel can be combined easily. The proportion of individuals who complete education beyond high school is presented in Table 3.5 above.

To summarise, this section explains how the two categorical home leaving age variables used in the econometric analysis, along with the continuous measure are created. These are a zero/one dummy variable and a four level categorical variable. I have explained that these two variables examine whether the age that individuals leave their parents' home influences the labour market and social outcomes in a non-linear way and how the stage of life an individual leaves home may be important. Also in this section, I explain the labour market and social outcomes which are examined, the different impact which each outcome measures and why I use the logged real hourly wage rate.

In this chapter, I have described the HILDA dataset, which is used in the econometric analysis of this paper and justified why this is an interesting case to study the short-run labour market costs associated with the age individuals leave home. Then, I described how the sample of individuals that the main econometric analysis is performed on has been created, including identifying the strengths and issues with the method of observing individuals leaving their parents' home. Then, I described the sample of individuals that the robustness checks are performed on. The final section presented the distribution of the ages that males and females left home for both the main sample and the robustness checks sample. Finally, statistics have been presented indicating how the individuals participated in the later waves of the survey.

4. Econometric models

In this section I describe the econometric models that are used in this study. These models used are as follow: first, I examine the determinants of the age that individuals leave home. Second, I examine what effect the age an individual leaves home has on their employment status in later waves of the HILDA survey. Third, I examine whether the age an individual leaves home has an effect on the hourly wage rate that individual receives in later waves of the HILDA survey. Fourth, I examine the effect that the age an individual leaves home has on their social outcomes in later waves of the HILDA survey. Fifth, I examine the robustness of the labour economic analysis using the extended sample of individuals, and the changes which are made to the models, which is necessary due to the availability of control variables.

Determinants of home leaving age

The first econometric model is used to examine what characteristics influence the age individuals leave their parents' home. The variables which are included are chosen based on the existing literature. I explain how the models are built up to examine all possible variables which influence the age that children decide to leave their parents' home. All of the models included below are estimated at the individual level with all control variables except personality being measured prior to leaving the parental home.

$$Age\ move_i = \beta_0 + \beta_1 Controls_i + \varepsilon \quad (1.1)$$

Equation 1.1 is the baseline model. In this regression, I use Ordinary Least Squares (OLS) regression to estimate the effect that these baseline control variables have on the age individuals leave their parents' home. The variables included in the baseline model are; major statistical region the child grew up in, the remoteness of the area the child grew up in, the country of birth of the individual and finally the quality of the relationship the child had with their parents prior to leaving home. These variables are included in the baseline model as

there are existing studies that indicate these variables may have an impact on when a child leaves their parents' home.

It is useful to have a quick description of the variables which are included in the models. I make a slight adjustment to the Major Statistical Region which has been seen before in the data chapter and is due to the sample size. I have combined ACT²¹ with the balance of New South Wales; the Northern territories have been combined with the balance of Queensland; Tasmania has been combined with the balance of Victoria; South Australia is now one region instead of Adelaide and the balance of South Australia; and Western Australia is one statistical region as opposed to Perth and the balance of Western Australia.

The remoteness area variable also has a slight adjustment made, which has been seen previously in the data chapter. Due to the small number of individuals in the sample who grew up in the remote and very remote regions of Australia, these have been combined with outer regional Australia. Thus, the remoteness variable has three levels; major city, inner regional Australia, and outer regional Australia or more remote. The reasons for including country of birth have been discussed in the literature review; I use the brief country of birth measure since the sample size is too small to include all countries individually. The brief country of birth variable in the HILDA survey has three categories; born in Australia, born in another English speaking country and born in a non-English speaking country.

The final variable which is included in the baseline model, measures the quality of the relationship that the individual had with their parents' prior to leaving home. This is a subjective measure on a scale of one to ten and is answered by the individuals in every wave of the survey. The expected sign on this variable is not exactly clear; it could be that having a good relationship with your parents' means you are more likely to remain living with them for longer than if you had a poor relationship. However, it may be that having a very good relationship with one's parents leads the individual to leave home earlier, as the parents will provide support even when their child no longer co-resides with them.

²¹ Australian Capital Territories

$$Age\ move_i = \beta_0 + \beta_1 Controls_i + \beta_2 Parental\ Controls_i + \varepsilon \quad (1.2)$$

Equation 1.2 adds the characteristics of the household which the child grew up in to the baseline model. The following household control variables are included; log real household income per equivalence person, the number of individuals who live in the home, the type of family the child grew up in and a measure for the highest education level of the household. These are included in this model because the variation in the household environment that the individual grew up in could influence the age that they decide to leave their parents' home. These variables are explained in the following paragraphs.

The variable indicating the type of household the child grew up in is a zero/one dummy that splits the individuals into two groups, depending if they live with both parents or not. This is to examine whether Australian children who grow up in non-standard households leave home at different ages than those who live with both parents growing up. The variable for the number of people living in the household is a continuous variable. This variable examines whether children who grow up in larger households leave home earlier to gain space or leave home later because of a greater family attachment to keep them at home.

The measure of the households' relative income is calculated using the total income earned by the household members, from all sources over a year calculated in real terms in 2005 dollars. To compare the income of a household with three members to a household that has seven members, an adjustment needs to be made. Using the Australian Bureau of Statistics (ABS) method of adjusting income for household size, which is a value of 1 for the first adult, 0.5 for all other adults, which is defined as being over 15 years old and 0.3 for every child under 15 years old. It is common practice to adjust the household size as there are some costs that the household shares, which don't increase at the same rate when the household size increases (i.e. energy usage O'Neill and Chen 2002). I then take the natural log of this real household income per equivalence person to remove the positive skewedness and make the interpretation of the coefficient more intuitive.

The final variable which is included in this model for the household characteristics is a measure of the educational achievements of the individuals' parents. For this variable, I am only using the highest level of educational achievement obtained by either parent. This is convenient to use as it allows individuals where there is only information available on one parent to be included in the model, this would not be the case if I included both mothers'

education and fathers' education. For this variable, I have four categories of educational achievement that are as follow; failed to complete high school, completed high school, obtained a post school certificate, such as a trade qualification and completed a tertiary degree, including postgraduate qualifications.

$$Age\ move_i = \beta_0 + \beta_1 Controls_i + \beta_3 Personality_i + \varepsilon \quad (1.3)$$

Equation 1.3 adds personality measures to the baseline model. The HILDA survey has two waves where the personality variables are measured, which are waves five and nine (Wilkins and Warren, 2012). The HILDA survey measures the big five personality variables which are; agreeableness, conscientiousness, extraversion, neuroticism and openness to experience. These personality traits are measured on self-assessed scale from one to seven. These personality variables have been used in a vast amount of research including; job performance (Barrick and Mount 1991; Judge et al. 1999), relationships (Shaver and Brennan 1992) and educational attainment (Busato et al. 1998) among other areas. Thus, it makes sense to examine if these measures of personality have any impact on the age that individuals decide to leave their parents' home.

When creating the personality variables, I use an average of the values from the fifth wave and the ninth wave. This way, if the individual only answered one of these two waves, the personality value is an average of one observation. However, this method is very useful when the individual answered the personality questions in both waves, as I don't have to choose which personality value to use. This is useful, as choosing which of the two personality values to use would be difficult to justify and work by Cobb-Clark and Schurer (2012, 2013) show that personality traits are stable over time.

$$Age\ move_i = \beta_0 + \beta_1 Controls_i + \beta_2 Parental\ Controls_i + \beta_3 Personality_i + \varepsilon \quad (1.4)$$

Equation 1.4 is the final model that is used to estimate what factors influence the individuals decision when to move out of their parents' home. This model includes both the

personality variables which are included in Equation 1.3 and the family and household background variables included in Equation 1.2. The results from estimating these four models are presented in the following chapter.

Employment models

The second econometric model which I describe is the model that estimates what effect the age individuals leave home has on their employment status. These models are used to examine whether leaving home at different ages influences the likelihood of being in paid employment in the outcome waves. The following paragraphs and equations describe the methods used and why these variables are included in the models. In the follow model the subscripts (i,t) represent the individual and time specific variables respectively.

$$Employed_{i,t} = \beta_0 + \beta_1 Age\ move_i + \beta_2 Age_{i,t} + year + \varepsilon \quad (2.1)$$

Equation 2.1 presents the baseline model that is used to estimate the effect that the age an individual leaves home has on the probability of being in paid employment. This model is estimated using a probit regression with marginal effects presented. The probit regression is used to estimate this effect, as the employment outcome variable is a zero/one dummy variable and coefficients represent the change in the probability of being employed for the change in the independent variables. The standard errors in the regressions are robust standard errors clustered at the individual level which allows for arbitrary correlation in the error terms for individuals over time.

The baseline model includes only; the age individuals left home, current age and current year as explanatory variables. This is the simplest possible way to examine whether the age individuals leave home influences the probability of being employed, although there is great possibility for omitted variables bias. This and all following regressions are repeated three times for the three definitions of home leaving age, which I have discussed in the previous chapter. The current age of the individual is included as it is likely to influence

whether the individual is employed or not. Controlling for the current year allows for changing macroeconomic conditions across the period of the outcome variables.

$$Employed_{i,t} = \beta_0 + \beta_1 Age\ move_i + \beta_2 Age_{i,t} + \beta_3 Personal_{i,t} + year + \varepsilon \quad (2.2)$$

Equation 2.2 adds individual specific controls to the baseline model. These variables describe the individual and are as follow; the marital status, educational achievement and country of birth of the individual and where the individual lives, described by major statistical area and remoteness of the area. The inclusion of these variables into the models is discussed in the following paragraph.

The controls for statistical region remoteness of location and country of birth are included in exactly the same way as they are in the determinants of home leaving age models. These control variables has been discussed previously, the only difference is that in the employment model I include current statistical region and location as controls instead of statistical region and remoteness of location prior to leaving home, as is the case in model that examines what determines the age individuals leave home. The marital status of the individual is a zero/one dummy variable and indicates whether the individual has a partner, which can be married or de-facto. The educational achievement variable is the highest qualification that the individual has achieved. This is coded into four categories; failed to complete high school, completed high school, completed post school certificate, tertiary qualification including postgraduate.

$$Employed_{i,t} = \beta_0 + \beta_1 Age\ move_i + \beta_2 Age_{i,t} + \beta_3 Personal_{i,t} + \beta_4 Personality_i + year + \varepsilon \quad (2.3)$$

Equation 2.3 continues the extension of the baseline model by including the big five personality variables. These are the same variables as those used in the previous regressions that examine the home leaving age. Personality variables have been widely used in labour econometric analysis, which I discussed in the literature review.

$$Employed_{i,t} = \beta_0 + \beta_1 Age\ move_i + \beta_2 Age_{i,t} + \beta_3 Personal_{i,t} + \beta_5 Parental_i + year + \varepsilon \quad (2.4)$$

Equation 2.4 uses the model presented in Equation 2.2 as the base and includes controls from the individuals' background which may influence their employment outcomes. The variables which I use here are; the education level of the individuals' parents, the relationship an individual has with their parents prior to leaving home whether the individual lived with both parents' prior to leaving home, and log real household income per equivalence person prior to the child leaving their parents' home. These variables are the same as those included in the models that estimate the determinants of the age individuals leave the parental home.

$$Employed_{i,t} = \beta_0 + \beta_1 Age\ move_t + \beta_2 Age_{i,t} + \beta_3 Personal_{i,t} + \beta_4 Personality_i + \beta_5 Parental_i + year + \varepsilon \quad (2.5)$$

Equation 2.5 presents the full model. This model includes the individual specific variables, which are included in the specification in Equation 2.2, the personality variables in Equation 2.3 and the historic controls included in Equation 2.4. These five equations shown are presented in the results for each of the three variables that define home leaving age; the continuous, the zero/one dummy and the four categories of home leaving age.

Wage rate models

The third set of econometric models, are those which I use to examine whether the age an individual leaves home influences the wage rate they earn in later waves of the HILDA survey. The econometric models used in this analysis are almost identical to the models describe above, which examine the employment effects with two key differences. The first of which is that the outcome variable is log real hourly wage rate. This results in the model being estimated using OLS regressions and clustered standard errors as opposed to probit regressions, as was the case for the employment analysis.

The second key difference between employment model and the earnings model is that actual work experience is included as an explanatory variable as opposed to age of the individual, as was the case in the employment model. This is done as actual years of work experience are a better predictor of the wage rate than the simple age of the individual. These two slight modifications are necessary and make the analysis more accurate.

Social Outcomes

The fourth set of econometric models I discuss are those which examine how the age an individual leaves home influences their social outcomes in later waves of the HILDA survey. The social outcomes which I examine are the impact home leaving age has on the likelihood of having a partner and the likelihood of completing a qualification beyond high school, which could be a trade certificate or a university qualification. I discuss the models in detail for the coupling outcome, either being married or in a de-facto relationship and briefly describe how the education models differ.

$$Married_{i,t} = \beta_0 + \beta_1 Age\ move_i + \beta_2 Current\ age_{i,t} + \varepsilon \quad (3.1)$$

Equation 4.1 above presents the baseline model which is used to examine whether the age individuals leave home influences the likelihood that they have a partner later in life. This baseline model only has the home leaving age variable and the current age of the individual as explanatory variables. This model examines the simple correlation between being married (or in a de-facto relationship) and the age that they left their parents' home. However, there may be some omitted variables bias, which may result from variables which are not included being correlated with the age they leave home and the likelihood of being in a relationship. These variables are included and explained in Equation 4.2 below. As the coupling of the individual is measured as a zero/one dummy variable, all the models are estimated using a probit model, with standard errors clustered at the individual level. In the results chapter, I present the marginal effects to make the coefficient interpretation more straightforward.

$$\begin{aligned} \text{Married}_{i,t} = & \beta_0 + \beta_1 \text{Age move}_i + \beta_2 \text{Current age}_{i,t} + \beta_3 \text{Personal}_{i,t} \\ & + \beta_4 \text{Personality}_i + \beta_5 \text{Parental}_i + \varepsilon \end{aligned} \quad (3.2)$$

Equation 4.2 is the full model that is used to examine whether the age an individual leaves their parents' home has any impact on their relationship status in later stages of life. In this model, I extend on the baseline model presented in Equation 4.1 to include variables which may be causing the omitted variables bias mentioned above. The variables that are included here have been discussed in detail when I explained the other models examined in this thesis. Thus, only a brief explanation of these variables needs to be provided here. These explanatory variables fall into three categories; individual specific characteristics, personality variables and variables which describe the background of the individual.

The explanatory variables which make up the individual specific characteristics are as follow. I control for the current region and remoteness of the location the individual lives in. I also control for the educational attainment and country of birth of the individual. These variables are included as they add additional explanatory power to the model, for example individuals born in non-English speaking countries may be more likely to be in a relationship.

The personality controls are the same big five personality traits²² which I have described previously. It is important to control for personality as there may be some personality types who are more or less suited to being in a relationship and different personality types may leave home at different ages. Finally, the parental control variables that are included in the econometric models are; real household income per equivalence person, individuals self-perceived relationship with their parents, a zero/one dummy indicating whether the individual lived with both parents and the highest level of education held by an individual's parents. These variables have been described in detail when I explained the model which examines what determines the age an individual leaves their parents' home.

The second social outcome which I examine is whether or not the individual completed any education beyond the end of high school. The educational outcome, like the coupling regressions are estimated using a probit model with standard errors clustered at the individual level, with the marginal effects presented. There are a couple of key differences between the coupling model and the education model as I explain below. First, obviously

²² Recall that the big five personality traits are extroversion, agreeableness, conscientiousness, neuroticism and openness to experience.

since education is the outcome variable it cannot be included as an explanatory variable. Second, I include the region and remoteness of location prior to the individual leaving home as this is more likely to explain the individuals' choice of educational achievement than their current region.

Robustness Models

In the following paragraphs, I explain what modifications must be made to the econometric models described above when using the extended sample, these modifications are necessary due to the availability of data for individuals who left home prior to the start of the HILDA survey. It is useful to recall that the robustness sample includes all individuals under the age of 32 in the first wave of the HILDA survey, who left home aged younger than 28 years old, prior to the first wave of the HILDA survey. The robustness tests are only performed on the labour economic analysis because parental education is so important in determining the educational achievement of their children and for the individuals who left home prior to the start of the HILDA survey I do not have exact levels of parental education. Thus, the educational achievement models would suffer from omitted variables bias, as such I have chosen to not perform the robustness tests on either of the social outcomes.

The parental control variables which are included in Equations 2.4 and 2.5 are; parents highest level of education, log real household income per equivalence person prior to leaving home, a zero/one dummy variable indicating whether the individual lived with both parents prior to leaving home and the individuals self-assessed quality of relationship with their parents prior to leaving home. These variables are all observed whilst the individual still remains living with their parents and by definition if the individual has left their parents' home prior to the start of the HILDA survey these variables will be unavailable. Thus, I need to make a small modification to these models when using the extended sample.

In the robustness models, parental controls are proxied for using three zero/one dummy variables which aim to describe the situation that the individual grew up in. The dummy variables included in the model are; whether or not the individual lived with both parents, mothers' employment status and fathers' employment status. These variables are gathered from retrospective questions based on when the individual was 14 years old. As

such, there is some concern that there may be some errors in the way individuals respond to these questions. However, there is no alternative data which can be used, so I just have to be aware of these and not make too much of an inference about the effect that these parental control variables have on the labour market outcomes.

These variables are chosen because they are well answered and provide some context on the background that the child experienced. It is useful to note that the employment status of the individuals' mother and father is coded as follow; one, indicates that the parent is in paid employment when the child was 14 years old and zero, is all other cases, this includes unemployed, deceased and no data available. There is one final modification which needs to be made regarding the age restrictions. In the robustness checks, I extend the age range that individual's labour market outcomes are analysed from between 25 and 34 years old to between 25 and 40 years old. This is necessary as the individuals included in the robustness tests are older than those in the main sample.

5. Results

In this chapter, I present the summary of the economic analysis and provide interpretations of the economic results. This chapter is split into the five following sections; first, I estimate what characteristics influence the age that individuals leave their parents' home. This is done to provide additional understanding of the decision that children make when they leave their parents' home. Second, I present the estimated effect that age individuals leave home has on labour market outcomes. The outcomes examined are employment status and hourly wage rate, this section uses the main sample of individuals who left their parents' home at some point between waves two and seven of the HILDA survey. Third, I check the robustness of the labour market models by including individuals who left their parents' home prior to the first wave of the HILDA survey. Fourth, I present models which estimate the effect the age Australian children decide to leave their parents' home has on social outcomes. In the thesis, I examine the partnering rates, married or de-facto and the likelihood of completing education beyond the end of high school. Finally, I summarize the findings of the econometric analysis.

5.1. Determinants of home leaving age

In this section, I present the regression analysis that examines how the characteristics of the individual and their background influence the age that they decide to leave home. These OLS regressions are presented separately for both males and females. In the discussion of the regression analysis, I place a specific focus on how males and females react differently to the characteristics of the environment which they grew up in.

Table 5.1 shows for females, how the characteristics of the individual and their background influence when they decide to leave their parental home. The first observation that can be made is that, for females, the quality of the relationship they have with their parents plays an important role in determining when they decide to leave their parents' home. For each additional point the individual values their relationship with their parents, they leave home between 0.18 and 0.26 years later, depending on the model specification. These estimates are statistically significant at the one percent level in all specifications of the model.

The regression results seen in Table 5.1 also indicate that, the region that females grow up in has an important role in determining the age that females decide to leave their parents' home. It can be seen that, compared to omitted category of growing up in Sydney, individuals who grew up in all other regions, except Victoria²³, Tasmania and Western Australia, left home between one and two years earlier. These estimates are statistically significant at the 1% level for the majority of the specifications. The remoteness of the region the individual grew up in also influences the individuals' decision to leave the parental home; the coefficients in Table 5.1 estimate the effect of growing up outside a major Australian city is associated with leaving home a year younger.

Only two of the big five personality traits have a statistically significant impact on the age that females decide to leave their parents' home. The results in Table 5.1 suggest that higher extroversion levels are associated with leaving the parents' home at younger ages and higher neuroticism levels are associated with leaving home at older ages, all else equal. There is only weak evidence to suggest that the country of birth has any impact on the age that females decide to leave their parents' home. Only females who are born in non-English speaking countries leave home at a statistically significantly different age than Australian born females, this effect is significant at the 5% level when controlling for all other variables.

The final set of variables which I control for are the characteristics of the household. The regression results can be seen in Table 5.1 and suggest a 10% change in real household income per equivalence person is associated with a female deciding to leave their parents' home between 0.07 to 0.08 years later, depending on the model specification. Household size and parents' highest education level appear to have no impact on the age females leave home in Model 2. However, in Model 4 once personality is controlled for, these variables appear to be statistically significant. From the regression results, I estimate that having an additional person in the household will lead to the individual leaving home 0.25 years earlier, and that if the females' parents have any education qualification, the female will leave home earlier than if they have no education. Interestingly, living with both parents or only one parent plays no role in females' decision on when to leave home.

²³ Includes both, Melbourne and the balance of Victoria & Tasmania.

Table 5.1: Determinants of the age females leave their parents' home

VARIABLES	(1)	(2)	(3)	(4)
Relationship with parents	0.259*** (0.048)	0.215*** (0.051)	0.213*** (0.052)	0.184*** (0.055)
Major Statistical Region				
Balance NSW & ACT	-1.190** (0.507)	-0.927* (0.514)	-1.174** (0.508)	-1.098** (0.502)
Melbourne	-0.209 (0.487)	-0.194 (0.501)	0.090 (0.510)	-0.148 (0.522)
Balance VIC & TAS	-1.169** (0.550)	-0.840 (0.552)	-1.015* (0.559)	-0.811 (0.554)
Brisbane	-2.117*** (0.585)	-1.777*** (0.539)	-1.777*** (0.569)	-1.735*** (0.526)
Balance QLD & NT	-1.798*** (0.570)	-1.400** (0.586)	-1.557*** (0.584)	-1.434** (0.577)
South Australia	-2.134*** (0.481)	-1.837*** (0.501)	-2.143*** (0.489)	-2.122*** (0.520)
Western Australia	-0.764 (0.557)	-0.536 (0.561)	-0.959* (0.542)	-0.858 (0.547)
Remoteness Area				
Inner Regional	-0.852** (0.378)	-0.945** (0.380)	-1.035*** (0.376)	-1.154*** (0.373)
Outer Regional & Remote	-1.373*** (0.347)	-1.313*** (0.373)	-1.192*** (0.365)	-1.129*** (0.385)
Country of Birth				
Other English speaking	0.418 (0.684)	-0.163 (0.568)	0.990 (0.760)	0.116 (0.677)
Non-English speaking	0.402 (0.495)	0.785 (0.551)	1.009* (0.516)	1.390** (0.595)
Household Characteristics				
Log relative HH income prior		0.809*** (0.238)		0.680*** (0.258)
Household Size		-0.121 (0.133)		-0.251** (0.097)
Live with both parents		0.424 (0.347)		0.471 (0.322)
Parents Highest Education				
Completed High School		-0.574 (0.611)		-1.047* (0.604)
Post school Certificate		-0.533 (0.355)		-0.692** (0.343)
Tertiary Qualification		-0.573 (0.391)		-0.815** (0.384)
Personality				
Extroversion			-0.275** (0.115)	-0.241** (0.116)
Agreeableness			0.297* (0.156)	0.225 (0.152)

Conscientiousness			0.098 (0.138)	0.083 (0.135)
Neuroticism			0.343*** (0.127)	0.318** (0.131)
Openness			0.188 (0.129)	0.122 (0.129)
Constant	20.021*** (0.458)	12.431*** (2.521)	17.023*** (1.128)	12.178*** (2.861)
Observations	436	395	386	352
R-squared	0.199	0.248	0.268	0.312
Adj. R-squared	0.177	0.212	0.235	0.264

Notes: Robust standard errors in parenthesis. Significance level * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Omitted categories; grew up in Sydney, grew up in major city, born in Australia, and parents highest level of education is failed to complete High School.

Table 5.2 presents the regression results that estimate, which variables impact Australian males' decision on when to leave their parents' home. The first observation which can be made is that the relationship males have with their parents has only a weakly significant impact on the age men leave the parental home. In the first three models, the estimates suggest that if a man has a better relationship with his parents, he will remain at home for 0.12-0.16 years longer, for each additional point on the one to ten relationship scale used by the HILDA survey. However, when all factors are controlled for the effect that the relationship with parents has on the age men leave home, is not statistically significant.

Table 5.2 below suggests that the region males grew up in plays an important role in determining the age they leave home in a couple of cases. Only those men who grew up in the balance of New South Wales & ACT and the balance of Queensland & Northern Territory, leave home statistically significantly younger than the reference case of Sydney. However, the remoteness of the location that males grew up in is statistically significant in all models. It can be seen from these results that individuals who grew up inner regional, outer regional and remote Australia leave home about a year younger than men who grew up in a major Australian city.

Country of birth is only significant in the models where I also control for the household characteristics. From these regressions, I can estimate that males who were born in another English speaking country leave home one year earlier than Australian born men. Being born in a non-English speaking country is not statistically significantly different from being born in Australia, once personality is controlled for. Of the big five personality

variables included in the regression analysis, only extroversion has a significant impact on the age that males decide to leave the parental home. For the regressions presented in Table 5.2, I estimate that, for every additional point a male scored on the one to seven extroversion scale they will remain in the parental home for approximately 0.3 years longer.

The characteristics of the household appear to play a very important role in determining the age men decide to leave their parents' home. The estimates in Tables 5.2 suggest that men are likely to leave 0.5 years earlier for each additional member there is in the household. If the individual lives with both parents, the estimates suggest that he will remain living at home for approximately one year longer than if he lived with only one of his parents. The real relative household income also influences a male's decision of when to leave home; these estimates suggest that a 10% increase in real household income per equivalence person is associated with leaving home 0.09 year later. Interestingly, the education level of the parents appears to not have a large influence on the age males leave their parents' home. Of the levels of education, only men of university qualified parents leave home at a younger age compared to the reference category of parents not having any qualification.

Table 5.2: Determinants of the age males leave their parents' home

VARIABLES	(1)	(2)	(3)	(4)
Relationship with parents	0.164*** (0.062)	0.137** (0.062)	0.125* (0.075)	0.103 (0.074)
Major Statistical Region				
Balance NSW & ACT	-1.201** (0.573)	-1.458*** (0.558)	-1.001 (0.639)	-1.501** (0.633)
Melbourne	0.640 (0.581)	0.872 (0.540)	0.479 (0.647)	0.739 (0.590)
Balance VIC & TAS	-0.608 (0.662)	-0.898 (0.631)	-0.575 (0.757)	-1.017 (0.727)
Brisbane	-0.952 (0.619)	-1.186** (0.587)	-1.009 (0.700)	-1.260* (0.664)
Balance QLD & NT	-1.293** (0.562)	-1.686*** (0.561)	-1.382** (0.637)	-1.963*** (0.642)
South Australia	-0.700 (0.557)	-1.329** (0.555)	-0.759 (0.655)	-1.483** (0.655)
Western Australia	-0.218 (0.619)	-0.807 (0.571)	-0.274 (0.723)	-0.917 (0.658)
Remoteness Area				
Inner Regional	-1.283*** (0.386)	-0.869** (0.397)	-1.474*** (0.436)	-0.926** (0.457)
Outer Regional & Remote	-1.616*** (0.373)	-1.184*** (0.407)	-1.849*** (0.455)	-1.099** (0.504)
Country of Birth				
Other English speaking	-0.594 (0.703)	-1.445*** (0.471)	-0.591 (0.686)	-1.454*** (0.560)
Non-English speaking	0.433 (0.571)	1.331*** (0.497)	-0.030 (0.688)	0.931 (0.610)
Household Characteristics				
Log relative HH income prior		0.897*** (0.265)		0.929*** (0.318)
Household Size		-0.524*** (0.116)		-0.578*** (0.131)
Live with both parents		0.927** (0.383)		1.005** (0.435)
Parents highest education				
Completed High School		-0.182 (0.477)		-0.030 (0.577)
Post school Certificate		-0.661 (0.401)		-0.404 (0.462)
Tertiary Qualification		-0.869** (0.402)		-0.822* (0.469)
Personality				
Extroversion			-0.334** (0.152)	-0.280* (0.155)
Agreeableness			0.064 (0.182)	0.109 (0.171)

Conscientiousness			0.199 (0.152)	0.053 (0.151)
Neuroticism			0.008 (0.165)	-0.051 (0.162)
Openness			-0.118 (0.152)	-0.060 (0.145)
Constant	21.016*** (0.648)	13.950*** (2.805)	22.326*** (1.435)	15.114*** (3.480)
Observations	444	403	366	337
R-squared	0.187	0.303	0.191	0.315
Adj. R-squared	0.164	0.270	0.151	0.264

Notes: Robust standard errors in parenthesis. Significance level * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Omitted categories; grew up in Sydney, grew up in major city, born in Australia, and parents highest level of education is failed to complete high school.

From these two sets of regressions above, I can make a few interesting comparisons about what factors influence male and female decisions on when to leave home. First, the region that the individual grew up in has a greater impact on the age which females leave home than for males. Second, the characteristics of the households' real household income per equivalence person, household size and living with both parents have a greater impact on when males leave home than females. Third, personality effects appear to be similar for both males and females, with extroversion levels having the greatest impact on when individuals leave home. Fourth, it is reassuring to observe that the coefficients have consistent signs.

5.2. Labour market analysis

In this section, I present the findings of the effect that the age individuals leave home has on the labour market outcomes in later waves of the HILDA survey. This section is split into three further sub-sections. First, I present the summary of the regressions that estimate the effect that the age individuals leave home has on employment status in later waves of the HILDA survey. Second, I present a summary of the effect that the age individuals leave home has on the hourly wage rate they receive in later waves of the HILDA survey. In both cases the regression analysis is presented separately for males and females, as is common in labour economic analysis. I also present the findings for each of the three measures of home leaving age, which I have created and discussed previously, these are; the continuous variable, dummy variable, and the four category variable. Finally, I check the coefficients of the other

explanatory variables, to ensure that they have the expected signs and magnitude. This is done to add additional validity to the main estimates.

Employment analysis

The first part of this section presents the employment analysis first for females and then for males. Table 5.3 below, presents the summary of the effect that the age females leave home has on short-run employment status. These estimates are presented for the continuous variable in Panel A, the dummy variable in Panel B, and the four category variable in Panel C. These estimates are the probit regressions presenting the marginal effects. The full regression tables are included in the Appendix Tables A.1, A.2 and A.3 respectively. The regression estimates in Panel A suggest that the home leaving age has no statistically significant impact on the employment status of females. These estimates are consistent across the five models that include the individual controls, personality measures and the characteristics of the household that women grow up in. Likewise, Panel B suggests that individuals who leave home older than 20 years old are not statistically significantly advantaged or disadvantaged in gaining paid employment. Like the continuous measure, these estimates are consistent across the five models estimated in Table 5.3.

Panel C in Table 5.3 suggests that, compared to the reference group of individuals who left home aged 19 or 20, females who left home aged between 15 and 18 are approximately 20% less likely to be in paid employment. This effect is marginally statistically significant; however, this effect is not consistent and depends on which explanatory variables are included in the models. As can be seen in Table 5.3, the inclusion of personality controls without the background controls appears to eliminate the effect that being in the young leavers group has on employment outcomes. However, when parental controls are included, there is some evidence to suggest that all else equal, females who leave home early are statistically significantly less likely to be in paid employment than the reference group.

Table 5.3: Female employment summary table

VARIABLES	(1)	(2)	(3)	(4)	(5)
Panel A: Continuous age left home					
Age Left Home	0.010 (0.015)	-0.000 (0.016)	-0.005 (0.016)	0.011 (0.019)	0.000 (0.020)
Panel B: Dummy variable					
Left home older than 20	0.082 (0.058)	0.054 (0.060)	0.044 (0.060)	0.066 (0.069)	0.043 (0.068)
Panel C: Categorical variable					
Age Left Home					
15-18	-0.137 (0.084)	-0.157* (0.089)	-0.151 (0.093)	-0.232** (0.096)	-0.198* (0.104)
21-22	0.039 (0.062)	0.011 (0.064)	0.012 (0.066)	0.005 (0.073)	0.002 (0.077)
23-28	0.029 (0.083)	-0.035 (0.092)	-0.073 (0.094)	-0.034 (0.106)	-0.097 (0.113)
Observations	892	892	813	761	692
Individual	No	Yes	Yes	Yes	Yes
Personality	No	No	Yes	No	Yes
Background	No	No	No	Yes	Yes

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Models estimated using probit regression and marginal effects presented. All models include; current age and year as explanatory variables. Individual variables are; marital status, education, statistical region, remoteness region, and country of birth. Personality variables are; extroversion, agreeableness, conscientiousness, neuroticism, and openness to experience. The background variables are; individuals' relationship with parents, log real household income per equivalence person, lived with both parents, and parents' education level. Full regression tables can be seen in the Appendix, Table A.1, Table A.2 and Table A.3.

Table 5.4 below presents the summary of the effect that the age males leave home has on short-run employment status. As was the case for the corresponding table of female employment outcomes, I present these estimates for the three home leaving age variables, the continuous variable in Panel A, the dummy variable in Panel B, and the four category variable in Panel C. These estimates are the probit regressions presenting the marginal effects. The full regression tables are included in the Appendix Tables A.4, A.5 and A.6 respectively.

The regression estimates in Table 5.4 do not suggest that the age males leave their parents' home influences the likelihood of being employed. In Panel A, all of the estimates are not statistically significant, except for the baseline model which only has the age the male left home and current age as explanatory variables. This suggests that there is some omitted variables bias in the model. Once I have controlled for the characteristics of the individual, the effect is no longer statistically significant.

Panel B has some interesting regression results to interpret. The estimates suggest that leaving home in the later age range may lead to better employment opportunities. Although, this estimated effect is only statistically significant in Model 3. Likewise, Panel C indicates a similar observation that even though the estimates are not statistically significant, the sign and magnitude are similar, indicating that males who leave home between 21 and 22, and 23 and 28 may be more likely to be employed than those who leave home in the reference category (19-20). Even though the results are not statistically significantly different from zero, in all but one of the models, the sign and magnitude are similar in all five models estimated. However, there is insignificant evidence to make any conclusions. Therefore, I test these effects using the robustness sample which is present in the following section.

Table 5.4: Male employment summary table

VARIABLES	(1)	(2)	(3)	(4)	(5)
Panel A: Continuous age left home					
Age Left Home	0.022*	0.017	0.018	0.011	0.008
	(0.013)	(0.012)	(0.012)	(0.013)	(0.013)
Panel B: Dummy variable					
Left home older than 20	0.058	0.061	0.092*	0.043	0.056
	(0.058)	(0.051)	(0.052)	(0.054)	(0.054)
Panel C: Categorical variable					
Age Left Home					
15-18	-0.048	-0.013	0.029	-0.008	0.035
	(0.077)	(0.070)	(0.059)	(0.067)	(0.054)
21-22	0.024	0.036	0.067	0.030	0.046
	(0.060)	(0.051)	(0.046)	(0.055)	(0.050)
23-28	0.089	0.090	0.128**	0.067	0.103*
	(0.068)	(0.057)	(0.057)	(0.063)	(0.062)
Observations	957	955	872	822	758
Individual	No	Yes	Yes	Yes	Yes
Personality	No	No	Yes	No	Yes
Background	No	No	No	Yes	Yes

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Models estimated using probit regression and marginal effects presented. All models include; current age and year as explanatory variables. Individual variables are; marital status, education, statistical region, remoteness region, and country of birth. Personality variables are; extroversion, agreeableness, conscientiousness, neuroticism, and openness to experience. The background variables are; individuals' relationship with parents, log real household income per equivalence person, lived with both parents, and parents' education level. Full regression tables can be seen in the Appendix, Table A.4, Table A.5 and Table A.6.

In the first part of the labour market analysis section, I have presented the estimates of the effect that the age individuals leave home has on the likelihood they are employed in later waves of the HILDA survey. There is only weak evidence in Tables 5.3 and 5.4 to suggest that leaving home at different age's leads to better or worse employment outcomes. It appears that women who leave their parents' home at a very young age have slightly worse employment outcomes. Men who leave home later have slightly higher probability of being employed. However, neither of these two effects can be stated confidently, as the estimates are not statistically significantly different from zero in all of the regression estimates, which may be due to the small sample size. In the robustness test try to confirm or reject these observations which have been made.

Earnings analysis

The second part of this section is used to present the findings of the econometric regressions, which are used to examine what effect the age individuals leave home has on the hourly wage rate they receive. These results are shown separately for males and females as is common in labour economic analysis. Table 5.5 below contains the summary of the estimated effect that home leaving age has on the hourly wage rate a woman receives. From the estimates presented in Panel A, it appears that the age females leave home does not have a linear effect on the wage rate they receive. However, the estimates presented in Panels B and C, suggest that there may be some non-linear effect that the age females leave home has on the wage rate a female receives.

Panel B in Table 5.5 below provides some evidence to suggest that females who leave home after their 21st birthday, earn a lower wage rate than those who leave home aged 20 or younger. However, this estimate is only statistically significantly different from zero in Model 5, which includes all of the explanatory variables. Although, the estimates in Models 2 to 4 are not statistically significant, the negative sign is consistent to the estimated effect observed in Model 5. However, there is insufficient evidence to conclude that females who leave home aged 21 or older are significantly disadvantaged in labour markets, for years after they left home and more work needs to be done in this area, with larger sample sizes.

Panel C in Table 5.5 also suggests that the age females leave home may have an impact on the wage rate the woman receives in later life. Compared to the reference category of leaving home aged 19 or 20 years old, females who leave home aged 21 or 22 appear to earn a statistically significantly lower hourly wage. However, these estimates are not consistent in magnitude and the inclusion of personality and background variables separately and together seems to influence the size of the effect. The estimates in Model 5 suggest that leaving home in this age group decreases the hourly wage rate by approximately 17%, compared to the reference group. Leaving in either of the two other age groups does not appear to have a statistically significant impact on hourly wage rate, compared to the reference group. However, the coefficients on the group aged 15-18 have consistent signs and magnitudes across the models, suggesting that females in this young leaver group may have lower wage rates than the reference group.

Table 5.5: Female hourly wage rate summary table

VARIABLES	(1)	(2)	(3)	(4)	(5)
Panel A: Continuous age left home					
Age Left Home	0.027** (0.012)	-0.000 (0.011)	-0.003 (0.011)	-0.003 (0.012)	-0.011 (0.013)
Panel B: Dummy variable					
Left home older than 20	0.038 (0.047)	-0.067 (0.048)	-0.076 (0.049)	-0.073 (0.049)	-0.100** (0.049)
Panel C: Categorical variable					
Age Left Home					
15-18	-0.022 (0.073)	-0.044 (0.056)	-0.059 (0.060)	-0.041 (0.074)	-0.079 (0.076)
21-22	-0.031 (0.055)	-0.108* (0.057)	-0.124** (0.060)	-0.126** (0.057)	-0.173*** (0.059)
23-28	0.150** (0.067)	-0.004 (0.062)	-0.018 (0.062)	0.019 (0.059)	-0.021 (0.061)
Observations	479	479	451	414	386
Number of individuals	173	173	164	141	132
Individual	No	Yes	Yes	Yes	Yes
Personality	No	No	Yes	No	Yes
Background	No	No	No	Yes	Yes

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Models estimated using OLS. All models include; total work experience and year as explanatory variables. Individual variables are; marital status, education, statistical region, remoteness region, and country of birth. Personality variables are; extroversion, agreeableness, conscientiousness, neuroticism, and openness to experience. The background variables are; individuals' relationship with parents, log real household income per equivalence person, lived with both parents, and parents' education level. Full regression tables can be seen in the Appendix, Table A.7, Table A.8 and Table A.9.

In the following paragraphs, I summarise the results that estimate the effect that the age males leave home has on the wage rate they receive. The summary of these regressions is presented in Table 5.6 below. The full regression results can be seen in the Appendix, Tables A.10, A.11 and A.12. The initial observation, which can be made from the data in Panel A, is that the age that males leave the parental home has no statistically significant effect on wage rate in any model, except for Model 1, where there are no other control variables, except work experience. That fact that home leaving age was significant and became statistically insignificant when other explanatory variables are included, suggests that there is omitted variables bias in Model 1.

Panel B of Table 5.6 examines the effect that home leaving age has on hourly wage, using the zero/one dummy variable. These estimates are not statistically significantly different from zero, in Models 2 through 5. However, these coefficients are all positive and have a similar magnitude, suggesting that leaving home later may actually result in higher wages for men. However, this statement cannot be made from the evidence which is present in Table 5.6. Panel C, as is expected, shows a similar effect when comparing more precise age groups. Although the estimates are not statistically significant, the estimates of the hourly wage rates for men in the 21-22 and 23-28 years old home leavers categories are all positive and of similar magnitude. Thus, if the sample was larger, I may be able to find statistically significant evidence of men who leave home later earning higher wage rates, all else equal.

Table 5.6: Male hourly wage rate summary table

VARIABLES	(1)	(2)	(3)	(4)	(5)
Panel A: Continuous age left home					
Age Left Home	0.049*** (0.012)	0.015 (0.011)	0.011 (0.011)	0.013 (0.012)	0.009 (0.012)
Panel B: Dummy variable					
Left home older than 20	0.176*** (0.061)	0.087 (0.058)	0.084 (0.062)	0.076 (0.065)	0.066 (0.070)
Panel C: Categorical variable					
Age Left Home					
15-18	-0.134 (0.087)	-0.054 (0.092)	-0.123 (0.101)	-0.011 (0.097)	-0.080 (0.106)
21-22	0.063 (0.067)	0.039 (0.066)	0.035 (0.073)	0.044 (0.072)	0.037 (0.077)
23-28	0.210*** (0.074)	0.105 (0.070)	0.072 (0.076)	0.104 (0.078)	0.059 (0.086)
Observations	607	605	574	526	500
Number of individuals	205	204	190	171	159
Individual	No	Yes	Yes	Yes	Yes
Personality	No	No	Yes	No	Yes
Background	No	No	No	Yes	Yes

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Models estimated using OLS. All models include; total work experience and year as explanatory variables. Individual variables are; marital status, education, statistical region, remoteness region, and country of birth. Personality variables are; extroversion, agreeableness, conscientiousness, neuroticism, and openness to experience. The background variables are; individuals' relationship with parents, log real household income per equivalence person, lived with both parents, and parents' education level. Full regression tables can be seen in the Appendix, Table A.10, Table A.11 and Table A.12.

In the earnings part of this section, I have presented a summary of the effect that the age females and males leave home on, has on the hourly wage rate they receive. Although, the effects are only weakly statistically significant, it is interesting to note how males and females are affected differently. Using the continuous measure, the age individuals leave home has no statistically significant impact on the hourly wage rate they receive. However, when the zero/one dummy and the four category variables are used in this analysis, there is some evidence to suggest that if females leave home in the late groups, they earn lower wages. Whereas, if a male leaves home later there is no statistically significant impact on the hourly wage rate they receive. This also indicates that males who remain at home longer than the average man, may be doing so for different reasons than females who remain living with their parents longer than the average woman. It could be that men who remain living with their parents are choosing to do so, to learn life skills that make them an overall more

attractive employee, whilst females that remain living with their parents are doing so because they are struggling to find good opportunities.

Checking validity of models

The final part of this section is used to check the overall validity of the models, which I have estimated in the previous parts of this section. This is done by testing the signs and magnitude of the coefficients of the other explanatory variables. Table 5.7 below contains the full regression output for the model with all the control variables. In the following paragraphs, I explain the observations which can be made from this table.

The first observation that can be made is that the level of education the individual has obtained has a major effect on both the likelihood of being in paid employment and the hourly wage rate an individual receives. Compared to the reference category of not completing high school education, having any other qualification increases both the likelihood of having a job and the wage rate an individual receives. These estimates are statistically significant in all but one case and the majority of the coefficients are statistically significant at the 1% level. This result is expected as there are many studies showing that education influences labour market outcomes. Some of these can be seen in the literature review chapter where I have discussed the core labour economic models.

Table 5.7: Employment and earnings coefficient tests

VARIABLES	Employment		Hourly wage rate	
	Female	Male	Female	Male
Age Left Home				
15-18	-0.198*	0.035	-0.079	-0.080
	(0.104)	(0.054)	(0.076)	(0.106)
21-22	0.002	0.046	-0.173***	0.037
	(0.077)	(0.050)	(0.059)	(0.077)
23-28	-0.097	0.103*	-0.021	0.059
	(0.113)	(0.062)	(0.061)	(0.086)
Age	-0.013	-0.002	----	----
	(0.018)	(0.009)		
Work Experience	----	----	0.029***	0.034***
			(0.010)	(0.011)
Married	0.043	0.164***	0.011	0.010
	(0.055)	(0.040)	(0.043)	(0.049)
Education Level				
Completed High School	0.245***	0.136***	0.297***	0.203**
	(0.075)	(0.039)	(0.069)	(0.089)
Post school Certificate	0.138	0.156***	0.273***	0.178*
	(0.097)	(0.049)	(0.067)	(0.094)
Tertiary Qualification	0.360***	0.233***	0.482***	0.519***
	(0.099)	(0.047)	(0.071)	(0.098)
Major Statistical Region				
Balance NSW & ACT	-0.258**	0.055	0.104	0.057
	(0.110)	(0.067)	(0.087)	(0.103)
Melbourne	-0.063	0.027	-0.071	0.074
	(0.088)	(0.045)	(0.076)	(0.082)
Balance VIC & TAS	-0.062	0.134***	-0.033	-0.008
	(0.138)	(0.040)	(0.105)	(0.133)
Brisbane	-0.096	0.097**	-0.136	-0.052
	(0.118)	(0.046)	(0.087)	(0.091)
Balance QLD & NT	-0.194*	0.062	-0.033	0.034
	(0.117)	(0.059)	(0.099)	(0.126)
South Australia	-0.107	0.002	-0.169**	-0.020
	(0.117)	(0.063)	(0.081)	(0.105)
Western Australia	0.040	0.013	-0.013	0.117
	(0.087)	(0.060)	(0.095)	(0.119)
Remoteness Area				
Inner Regional	-0.060	-0.103	-0.093	0.005
	(0.090)	(0.078)	(0.071)	(0.100)
Outer Regional & Remote	0.014	-0.094	-0.001	0.015
	(0.098)	(0.086)	(0.087)	(0.123)
Country of Birth				
Other English Speaking	-0.288*	0.033	-0.160	0.031
	(0.171)	(0.078)	(0.102)	(0.178)
Non-English Speaking	-0.034	0.044	0.156	0.130
	(0.115)	(0.061)	(0.108)	0.031

Personality				
Extroversion	0.026 (0.025)	-0.036** (0.018)	0.036 (0.025)	0.018 (0.026)
Agreeableness	-0.005 (0.039)	0.045** (0.021)	0.018 (0.030)	-0.051 (0.032)
Conscientiousness	0.035 (0.027)	-0.014 (0.019)	-0.008 (0.021)	0.003 (0.028)
Neuroticism	-0.004 (0.026)	0.006 (0.018)	-0.028 (0.024)	-0.004 (0.031)
Openness	-0.013 (0.031)	-0.038** (0.018)	0.017 (0.023)	0.015 (0.028)
Background Characteristics				
Relationship with Parents	-0.003 (0.013)	-0.004 (0.009)	0.009 (0.013)	0.013 (0.020)
Log relative HH income	0.072 (0.045)	-0.023 (0.032)	-0.041 (0.030)	0.111** (0.046)
Lived with both parents	0.096 (0.079)	0.034 (0.047)	0.036 (0.056)	0.069 (0.080)
Parents Highest Education				
Completed High School	-0.044 (0.142)	0.082 (0.053)	-0.016 (0.123)	-0.058 (0.090)
Post school Certificate	0.027 (0.082)	0.052 (0.048)	-0.092 (0.064)	-0.067 (0.075)
Tertiary Qualification	-0.088 (0.096)	-0.005 (0.053)	-0.063 (0.079)	-0.018 (0.085)
Year				
2006	-0.075 (0.123)	0.036 (0.085)	0.001 (0.073)	-0.048 (0.099)
2007	-0.132 (0.138)	0.052 (0.064)	0.014 (0.066)	-0.174* (0.100)
2008	-0.195 (0.138)	0.096 (0.060)	0.030 (0.079)	-0.052 (0.101)
2009	-0.200 (0.147)	0.103 (0.066)	0.049 (0.082)	0.005 (0.102)
2010	-0.186 (0.161)	0.101 (0.068)	0.099 (0.084)	0.066 (0.112)
2011	-0.160 (0.162)	0.078 (0.076)	0.069 (0.089)	0.052 (0.114)
Constant	----	----	2.884*** (0.368)	1.193** (0.579)
Observations	692	758	386	500
R-squared	----	----	0.341	0.357
Number of individuals	----	----	132	159
Pseudo R-squared	0.133	0.146	----	----

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Omitted variables; left home aged 19-20, has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, parents did not complete high school, 2005. Employment models, estimated using probit models, robust standard errors clustered at individual level and marginal effects presented. Hourly wage rate models, estimated using OLS and robust standard errors clustered at the individual level, using log hourly wage rate as outcome variable.

The second observation which can be made is how work experience and age influence the hourly wage rate and employment status respectively. The estimates in Table 5.7 above suggest that for each additional year of work experience an individual has, their hourly wage rate increases by approximately 3%. This is the case for both males and females. Interestingly, the current age of the individual does not have a statistically significant impact on the likelihood of being in paid employment. This may be due to the ages of the individuals being similar (25-34) thus, there is insufficient variation to show any trend between age and employment status.

The third observation which I can make from Table 5.7 above is how little effect the marital status of the individual has on their labour market outcomes. Of the four estimates presented in Table 5.7 above, only the effect on males' employment status is statistically significant. The estimated effect is, that men who are married (or in a de-facto relationship) are 16% more likely to be in paid employment than unmarried men. This positive association with marriage and employment status is expected. Due to the relatively small sample size, I am unable to observe any marital status effects for the other regressions.

The fourth observation which can be made from Table 5.7 is that some of the variables which would usually have a statistically significant impact on labour market outcomes are not statistically significant. These are the statistical region, remoteness of location, country of birth, personality and parental controls. This may be due to the relatively small number of individuals who left their parents' home between waves two and seven of the HILDA survey. However, it is reassuring to see, of the few coefficients in this group which are statistically significant, none have unexpected signs.

Combined, these four observations which have been discussed from the regression coefficients presented in Table 5.7, confirm the validity of the models which I am estimating. This is reassuring, as it means the marginally significant effects observed in the small sample can be tested using the extended sample and then either be confirmed or rejected. When I use the extended sample, more of the explanatory variables are statistically significant, which is expected.

5.3. Labour market robustness test

In this section, I use the larger sample, which includes some of the individuals who left their parents' home prior to the first wave of the HILDA survey, to check the robustness of the effect that the age individuals leave home has on employment status and hourly wage rate. As I discussed in the previous section, there is only weak evidence to suggest that leaving home at different ages has any effect on employment status. Likewise, I was only able to find weak evidence to suggest that leaving home at different ages has any effect on the hourly wage rate an individual receives. I only found evidence to suggest that females who left home at older ages received significantly lower hourly wages. In this section, I test these findings to see whether they are consistent when the larger sample is used and whether or not the larger sample size is able to find other statistically significant results. This section is split into three sub-sections as follow; first, I test the robustness of employment analysis, second, I test the robustness of the earnings analysis.

Employment analysis robustness test

The first half of this section checks the robustness of the employment analysis presented in the previous section. I present this separately for males and then for females. From the estimates in Tables 5.3 and 5.4, females who leave in the very young (15-18) category are less likely to be in paid employment than the reference category of (19-20). Similarly, those who leave home later may be more likely to be in paid employment, although these results are not statistically significant. In the following paragraphs, I discuss the robustness test estimates of the effect that the age females leave home has on employment status, then I do the same for males.

Table 5.8 below contains the summary of the effect that the age females leave home has on their employment status. In the main sample analysis, I observed some weak evidence to suggest that females who left their parents' home in the younger categories have a slightly lower likelihood of being employed. From Panel A in Table 5.8 below, it is reassuring to observe that the continuous home leaving age variable does not have a statistically significant

impact on the employment status of females, as was the observation made in the corresponding panel from Table 5.3.

When I examine the categorical effects in Panels B and C of Table 5.8, I observe that none of the estimates are statistically significant. This suggests that, even though I do observe some weak evidence in Table 5.3 to suggest females who leave home aged 18 or younger have a lower likelihood of being employed, it is likely that the age females leave home does not influence the likelihood of being employed. However, this does not mean that leaving home at different ages cannot affect the hourly wage rate these females receive, in later waves of the HILDA survey.

Table 5.8: Robustness tests of female employment summary table

VARIABLES	(1)	(2)	(3)	(4)	(5)
Panel A: Continuous age left home					
Age Left Home	0.009*** (0.004)	0.004 (0.004)	0.005 (0.004)	0.002 (0.005)	0.001 (0.005)
Panel B: Dummy variable					
Left home older than 20	0.052** (0.020)	0.023 (0.021)	0.022 (0.022)	0.014 (0.026)	0.007 (0.028)
Panel C: Categorical variable					
Age Left Home					
15-18	-0.039 (0.026)	-0.039 (0.026)	-0.043 (0.027)	-0.002 (0.033)	-0.004 (0.035)
21-22	0.005 (0.032)	-0.022 (0.032)	-0.028 (0.033)	-0.020 (0.039)	-0.030 (0.042)
23-28	0.045 (0.033)	0.017 (0.034)	0.016 (0.036)	0.057 (0.042)	0.053 (0.045)
Observations	6,525	6,525	5,979	4,237	3,861
Individual	No	Yes	Yes	Yes	Yes
Personality	No	No	Yes	No	Yes
Background	No	No	No	Yes	Yes

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Models estimated using probit regression and marginal effects presented. All models include; current age and year as explanatory variables. Individual variables are; marital status, education, statistical region, remoteness region, and country of birth. Personality variables are; extroversion, agreeableness, conscientiousness, neuroticism, and openness to experience. The background variables are; lived with both parents, mothers employment status when individual was 14 and fathers employment status when individual was 14. Full regression tables can be seen in the Appendix, Table A.13, Table A.14 and Table A.15.

In the following paragraphs, I check the robustness of the findings presented previously, of the effect that the age men leave home has on their employment status in future

waves of the HILDA survey. Recall that Table 5.4 indicated that the age that males leave home has no statistically significant impact on employment status. However, there was some weak evidence to suggest that males, who leave home later, may be more likely to be employed. These findings are checked using the robustness sample in Table 5.9 below.

Panel A, in Table 5.9 below, estimates the linear effect home leaving age has on the probability of being employed. The estimates in Models 1 to 3 suggest that leaving home later may lead to a higher likelihood of being employed. However, when the parental controls are included in Models 4 and 5, the effect that home leaving age has on employment status is not statistically significant. This suggests that there is omitted variables bias in Models 1 to 3, which is expected, given the findings in Table 5.2 that suggest characteristics of the household influence the age males leave home.

The estimates in Panel B suggest that, leaving home aged 21 or older does not have a statistically significant effect on the probability of being employed, compared to the reference category of leaving home aged 20 or younger. Panel C, examines this effect using four categories of home leaving age. Compared to the reference category of leaving home age 19-20, Models 1 to 3 suggest that men who leave home in the extreme late group (23-28), are statistically more likely to be in paid employment. However, when parental controls are included, these estimates are no longer statistically significant, indicating some omitted variables bias in Models 1 to 3. These regression results presented in Table 5.9, confirm the findings that the age men leave home has no statistically significant effect on the probability of being employed.

Table 5.9: Robustness tests of male employment summary table

VARIABLES	(1)	(2)	(3)	(4)	(5)
Panel A: Continuous age left home					
Age Left Home	0.009*** (0.003)	0.006** (0.003)	0.005* (0.003)	0.005 (0.004)	0.004 (0.004)
Panel B: Dummy variable					
Left home older than 20	0.043** (0.018)	0.023 (0.018)	0.028 (0.018)	0.015 (0.022)	0.020 (0.022)
Panel C: Categorical variable					
Age Left Home					
15-18	0.015 (0.025)	0.008 (0.025)	0.017 (0.025)	0.012 (0.030)	0.027 (0.031)
21-22	0.014 (0.029)	-0.002 (0.029)	0.016 (0.029)	-0.005 (0.035)	0.023 (0.034)
23-28	0.078*** (0.025)	0.051** (0.026)	0.055** (0.026)	0.046 (0.032)	0.047 (0.032)
Observations	5,248	5,245	4,737	3,527	3,218
Individual	No	Yes	Yes	Yes	Yes
Personality	No	No	Yes	No	Yes
Background	No	No	No	Yes	Yes

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Models estimated using probit regression and marginal effects presented. All models include; current age and year as explanatory variables. Individual variables are; marital status, education, statistical region, remoteness region, and country of birth. Personality variables are; extroversion, agreeableness, conscientiousness, neuroticism, and openness to experience. The background variables are; lived with both parents, mothers' employment status when individual was 14 and fathers' employment status when individual was 14. Full regression tables can be seen in the Appendix, Table A.16, Table A.17 and Table A.18.

In this sub-section, I have checked the findings of the effect that the age individuals leave home has on employment status of males and females. The main analysis, presented in Tables 5.3 and 5.4, suggests that females who left home at very young ages may be less likely to be in paid employment and males who left older, may more likely to be in paid employment, though these effects were only marginally significant or not significant at all. After examining the robustness test regressions, which include a larger sample of individuals, I am confidently able to conclude that the age males and females leave home has no statistically significant impact on the probability of being employed. However this may be in part due to such a large proportion of may sample being employed in the outcome panel. Although, it is important to control for characteristics of the household the child grew up in for men. This is because these characteristics influence the age which men leave home and if they are not included in the model, the estimates are affected by omitted variables bias.

Earnings analysis robustness test

In the second half of this section I present the robustness tests of the effect that the age individuals leave home has on hourly wage rate. It is important to recall, from Tables 5.5 and 5.6, that I observe some weak evidence to suggest that females who left their parents' home in later age groups earn lower wages and males who leave home in later age groups may earn higher wages. However, the evidence was not consistently statistically significant. Thus, I was unable to confidently make a conclusion based on that evidence alone. In this section, I use the extended sample of individuals, including people who left home prior to the first wave of HILDA, to test these findings for females and in the second half, males.

Table 5.10 presents the summary of the regressions, which examine the effect that the age females leave home has on hourly wage rate, using the extended sample. Recall that from Table 5.5 I observed some evidence to suggest that females who leave home aged 21-22 earn statistically significantly lower wages than the reference category of aged 19-20. From Panel A in Table 5.10 below, it can be seen that the age females leave home has no linear effect on the hourly wage rate received. Panel B estimates the effect leaving home aged 21 or older has on hourly wage rate. The estimates in this panel suggest that there is no statistically significant difference in hourly wage rate when females are separated into two groups using this cut-off.

Panel C of Table 5.10 below, estimates the hourly wage rate of young leavers (15-18), late leavers (21-22) and extreme late leavers (23-28), compared to the reference group (19-20). All of the coefficients estimated in this panel are negative, however, only the coefficients on the old leavers are statistically significant, and are so across all 4 model specifications, where some explanatory variables are included. This reinforces the findings in Table 5.5, which suggested females who are in the late leavers group have a statistically significantly lower hourly wage rate. The estimates in Table 5.10 below suggest this hourly wage rate difference is between 8 and 10% lower, depending on model specification. These estimates are smaller in magnitude to the estimated effect presented in Table 5.5 for the main sample. However, this slightly smaller effect seems to be more realistic. Thus, I can confidently state, that according to the estimates in this thesis, Australian females who leave their parents' home in the late group earn approximately 10% less per hour than the reference group.

Table 5.10: Robustness tests of female hourly wage rate summary

VARIABLES	(1)	(2)	(3)	(4)	(5)
Panel A: Continuous age left home					
Age Left Home	0.016*** (0.005)	-0.002 (0.004)	-0.002 (0.004)	0.000 (0.006)	0.001 (0.006)
Panel B: Dummy variable					
Left home older than 20	0.053** (0.027)	-0.038 (0.024)	-0.041* (0.024)	-0.029 (0.031)	-0.035 (0.031)
Panel C: Categorical variable					
Age Left Home					
15-18	-0.030 (0.036)	-0.027 (0.032)	-0.021 (0.032)	-0.012 (0.042)	-0.022 (0.044)
21-22	-0.031 (0.041)	-0.096** (0.038)	-0.100*** (0.037)	-0.082* (0.049)	-0.104** (0.050)
23-28	0.100** (0.045)	-0.015 (0.039)	-0.006 (0.039)	0.020 (0.051)	0.024 (0.053)
Observations	3,425	3,425	3,246	2,274	2,151
Number of individuals	985	985	921	626	582
Individual	No	Yes	Yes	Yes	Yes
Personality	No	No	Yes	No	Yes
Background	No	No	No	Yes	Yes

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Models estimated using OLS regression, standard errors clustered by individual. All models include; total work experience and year as explanatory variables. Individual variables are; marital status, education, statistical region, remoteness region, and country of birth. Personality variables are; extroversion, agreeableness, conscientiousness, neuroticism, and openness to experience. The background variables are; lived with both parents, mothers' employment status when individual was 14 and fathers' employment status when individual was 14. Full regression tables can be seen in the Appendix, Table A.19, Table A.20 and Table A.21.

In the following paragraphs, I present the estimated effect that the age males leave home has on the hourly wage rate men receive. Recall that, the main sample results presented in Table 5.6 suggest that the age men left home has no statistically significant impact on hourly wage rate. Although, there is some evidence to suggest that men who left home later may receive higher hourly wages thus, it needs to be tested with a larger sample size. These robustness tests are presented in Table 5.11 below.

Panel A, of Table 5.11 below, estimates the linear effect that the age men leave home has on hourly wage rate. These coefficients suggest that the age men leave home has no statistically significant impact on the hourly wage rate they receive in later waves of the HILDA survey. Panel B examines this effect using the zero/one dummy variable, this compares the hourly wage rates of men who left home 21 years or older to those men who left home aged 20 or younger. Of the coefficients presented in this panel, only the estimate in

Model 5 is statistically significantly different from zero. This estimate suggests that males who leave home after their 21st birthday earn approximately 5% less than those who leave home before this. However, this estimated effect is only marginally statistically significant at the 10% level.

Panel C, of Table 5.11 below, uses the four category variable to examine the effect that home leaving age has on hourly wage rate. The coefficients in this panel compare the hourly wage rate of young leavers (15-18), late leavers (21-22) and extreme late leavers (23-28) to the reference category of men who left home aged 19 or 20. This panel presents weak evidence to suggest that males who leave their parents' home in the older age groups earn statistically significantly lower hourly wage rates. However, this effect is only weakly statistically significant in models where the background of the male has been controlled for. This is conflicting evidence to the findings of the main analysis presented in Table 5.6. However, neither of the effects are consistently significant across the model specifications, as such, I cannot make a confident statement saying the age that a man leaves home has a statistically significant effect on hourly wage rate.

Table 5.11: Robustness tests of male hourly wage rate summary table

VARIABLES	(1)	(2)	(3)	(4)	(5)
Panel A: Continuous age left home					
Age Left Home	0.008 (0.005)	0.001 (0.004)	0.002 (0.004)	-0.005 (0.005)	-0.007 (0.005)
Panel B: Dummy variable					
Left home older than 20	0.032 (0.028)	-0.009 (0.025)	-0.008 (0.026)	-0.051 (0.031)	-0.055* (0.032)
Panel C: Categorical variable					
Age Left Home					
15-18	0.036 (0.040)	-0.028 (0.033)	-0.028 (0.034)	-0.043 (0.038)	-0.041 (0.038)
21-22	0.011 (0.044)	-0.045 (0.038)	-0.033 (0.038)	-0.080* (0.046)	-0.068 (0.046)
23-28	0.085** (0.043)	-0.016 (0.037)	-0.022 (0.037)	-0.080* (0.046)	-0.095** (0.045)
Observations	3,522	3,520	3,283	2,477	2,319
Number of individuals	880	879	800	584	536
Individual	No	Yes	Yes	Yes	Yes
Personality	No	No	Yes	No	Yes
Background	No	No	No	Yes	Yes

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Models estimated using OLS regression, standard errors clustered by individual. All models include; total work experience and year as explanatory variables. Individual variables are; marital status, education, statistical region, remoteness region, and country of birth. Personality variables are; extroversion, agreeableness, conscientiousness, neuroticism, and openness to experience. The background variables are; lived with both parents, mothers' employment status when individual was 14 and fathers' employment status when individual was 14. Full regression tables can be seen in the Appendix, Table A.22, Table A.23 and Table A.24.

In this section, I have checked the robustness of the estimated effect that home leaving age has on hourly wage rate. Tables 5.10 and 5.11 confirm the findings observed in the main sample analysis, which is that females who are late leavers (21-22), earn statistically significantly lower wages than females who leave home aged 19 or 20. This section also confirmed the fact that the age men leave home does not have any effect on hourly wage rate they receive in later waves of the HILDA survey.

5.4. Social outcomes regressions

In this section, I present the summary of the effect that the age individuals leave home has on social outcomes. The equations that are used for the regression analysis have been presented and discussed previously. It is useful to recall that Equations 3.1 and 3.2 are used to

examine the effect that the home leaving age has on the social outcomes of the individual. This analysis is performed separately for males and females and the summary effects are presented below and full regression tables can be seen in the Appendix. This section is split into the three following parts; first, I present the effect that the age an individual leaves home has on coupling, second, the effect that home leaving age has on educational achievement and finally I check the validity of these estimates by examining the coefficients of the other variables.

Marital status analysis

Table 5.12 below summarises the effect that the age individuals leave their parents' home has on the probability they have a partner in later life. This effect is shown for the continuous home leaving age in Panel A, the zero/one dummy in Panel B and the four categories of home leaving age in Panel C. As can be seen in Table 5.12, there are separate columns for males and females as they may be affected differently.

The estimates in Table 5.12 suggest that females who leave the parental home at older ages are statistically significantly less likely to live with a partner. The estimates in Panel A suggest that, for each additional year a woman remains living with their parents she is 3% less likely to be in a relationship in later waves of the HILDA survey. However, this effect is only marginally statistically significant. Panel B indicates that females who leave home aged 21 or older are approximately 15% less likely to have a partner. This result is statistically significant at the 5% level of significance. Panel C indicates that the majority of the difference observed in Panel B is being driven by the individuals who left home aged 21-22. This may be due to the concern identified previously that the individuals who are in the 23-28 group may be staying at home longer due to external forces, may be completely different from the remainder of the population or have already left home and returned, so this is their second or third time of leaving home.

The estimates for men provide evidence to suggest that male coupling is affected differently by the age they leave home. The evidence in these three panels suggests that the age men leave home has very little effect on the probability of having a partner. Panel A, indicates that the age men leave home have no statistically significant impact on the

probability they have a partner in later waves of the HILDA survey. Panel B also indicates no statistically significant difference in partnering rates when men are separated into two groups of home leaving age, prior to turning 21 and after turning 21. Similarly, there is only weak evidence to suggest that there is any difference in the likelihood of finding a partner when different ages of leaving are compared with the common home leaving ages, 19 and 20 years old. Only those individuals who left home aged 15-18 have a statistically significantly lower probability of being in a relationship in later waves of the HILDA survey, although, this effect is only marginally statistically significant.

Table 5.12: Coupling regressions summary

VARIABLES	Female		Male	
	Baseline	Controls	Baseline	Controls
Panel A: Continuous age left home				
Age Left Home	-0.008 (0.013)	-0.029* (0.016)	0.014 (0.013)	-0.003 (0.016)
Panel B: Dummy variable				
Left home older than 20	-0.091 (0.059)	-0.149** (0.067)	0.043 (0.064)	-0.053 (0.075)
Panel C: Categorical variable				
Age Left Home				
15-18	-0.113 (0.095)	-0.056 (0.109)	-0.116 (0.102)	-0.208* (0.123)
21-22	-0.146* (0.078)	-0.189** (0.090)	0.031 (0.078)	-0.092 (0.094)
23-28	-0.102 (0.087)	-0.139 (0.109)	-0.007 (0.081)	-0.139 (0.097)
Observations	892	692	957	758
Controls	No	Yes	No	Yes

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Models estimated using probit regression and marginal effects presented. The baseline models control includes current age as an explanatory variable along with the home leaving age variable. The full model adds, education, current statistical region, remoteness of location, country of birth, personality traits, parents education, family type, log real household income per equivalence person and relationship with parents. Full regression tables can be seen in the Appendix, Table A.25 and Table A.26.

Educational achievement analysis

In the second part of this section, I present the estimates of the effect that the age individuals leave home has on educational attainment of the individual. The educational achievement variable which I examine here is a zero/one dummy variable for whether or

not the individual completes education beyond the high school level. This level of educational achievement is chosen because it shows if the individual is ambitious or not regarding their educational achievement. If I were to examine the likelihood of completing university education, I would be concerned that the results may be biased by some unobserved characteristics about the skills related to the type of learning provided by universities, compared with certificate trades.

In the following paragraphs, I summarise these regressions which I have performed separately for males and females, using the three measures of home leaving age; continuous, zero/one dummy and four categories of leaving home. These regressions are presented in Table 5.13 below. These regressions provide little statistically significant evidence to suggest leaving home at different ages results in different rates of educational attainment. This could be due to the fact that Australia is a highly urbanised country and choosing to complete future education does not result in the need to move.

Of the estimates in Table 5.13, below only females who leave home aged 23-28 are statistically significantly more likely to complete higher education than the reference category of females who left home 19 or 20. I am not very confident in making any conclusions from this estimate alone due to the strange findings of the previous analysis for this extreme late leavers group. The main concern is that this group may have left home and returned so the recorded age is not the age they first left their parents' home.

Interestingly the dummy variable is not statistically significant. This may be due to the relatively small sample size, which results in not very precise estimates. However, these results cannot be checked using the robustness sample, due to the parental variables, specifically education, having such a large impact in the likelihood of completing higher education, which I discuss in the following sub-section. Using the robustness sample would be concerning, as I do not have as detailed parental variables for the individuals who left home prior to the first wave of the HILDA survey. This is because the parents of these individuals are not necessarily included in the HILDA survey.

Likewise, the evidence of the effect that the age men leave home has on educational achievement is somewhat inconsistent. Panel A suggests that leaving home a year later is associated with a 4% increase in the likelihood of completing higher education. However, when further investigation is performed with the zero/one dummy and categorical variable, the results appear to be inconclusive. It appears that the majority of the effect in Panel A is

coming from the very young leavers; however, these estimates are not estimated precisely enough to be statistically significant. As is the case for females, I do not feel confident using the extended sample to check the effect the age an individual leaves home has on educational achievement, due to the parental variables having such an important role in determining whether the individual completes higher education or not. I discuss the importance of the parental variables, along with the other variables included in the econometric models in the following part of this section.

Table 5.13: Education regressions summary

VARIABLES	Female		Male	
	Baseline	Controls	Baseline	Controls
Panel A: Continuous age left home				
Age Left Home	0.020 (0.013)	0.017 (0.016)	0.023* (0.013)	0.040** (0.017)
Panel B: Dummy variable				
Left home older than 20	0.098 (0.065)	0.108 (0.075)	0.031 (0.068)	0.019 (0.079)
Panel C: Categorical variable				
Age Left Home				
15-18	-0.103 (0.098)	0.075 (0.075)	-0.132 (0.112)	-0.186 (0.132)
21-22	0.034 (0.074)	0.105 (0.073)	-0.000 (0.084)	-0.056 (0.097)
23-28	0.131 (0.081)	0.185** (0.083)	0.001 (0.084)	0.023 (0.099)
Observations	892	692	957	758
Controls	No	Yes	No	Yes

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Models estimated using probit regression and marginal effects presented. The baseline models control includes current age as an explanatory variable along with the home leaving age variable. The full model adds, statistical region the child grew up in, remoteness of location the child grew up in, country of birth, personality traits, parents education, family type, log real household income per equivalence person and relationship with parents. Full regression tables can be seen in the Appendix, Table A.27 and Table A.28.

Checking validity of social outcome models

The final part of this section tests the overall validity of the social outcome models by examining which of the other explanatory variables are significant in determining whether an individual is in a relationship or completes a qualification beyond high school. In Table 5.14

below I have included the full regression output for the four categories of home leaving age, with all explanatory variables included. It is important to note that the coefficients look very similar for the three different measures of home leaving age. In the following paragraphs, I discuss the observations which can be made, including the effect that age, personality and background characteristics have on these two social outcomes.

The first observation, which can be made from Table 5.14 below, is that the current age of the individual is important in determining whether the individual has a partner or has completed higher education. The estimates in the table above suggest that a man is approximately 5% more likely to have a partner for each year older he is, a woman is approximately 3% more likely to have a partner each year older she is. This positive association between current ages a coupling is expected and the difference between males and females could be explained by the fact that females are more likely to be in a relationship at 25 years old. Therefore, there is less room for females to increase their likelihood of having a partner. Interestingly, for each additional year older a man is they are 6% more likely to have completed some form of education beyond high school. This is surprisingly high and could be explained by decreasing educational achievement among men, or men choosing to re-train between the ages of 25 and 34.

The second observation which can be made is that education levels appear to have a negative effect on the likelihood of having a partner. This is an interesting result which requires some thought. It is usually assumed that more highly educated individuals are more attractive to potential partners than less educated individuals. However, the effect observed in Table 5.14 below could be explained by the age restrictions that have been made. Because these highly educated individuals have completed education, they may not have formed a stable relationship and thus, all else equal, especially current age, they are less likely to have a partner than someone who failed to complete high school.

Table 5.14: Full social outcome models

VARIABLES	Coupling		Education	
	Female	Male	Female	Male
Age Left Home				
15-18	-0.056 (0.109)	-0.208* (0.123)	0.075 (0.075)	-0.186 (0.132)
21-22	-0.189** (0.090)	-0.092 (0.094)	0.105 (0.073)	-0.056 (0.097)
23-28	-0.139 (0.109)	-0.139 (0.097)	0.185** (0.083)	0.023 (0.099)
Age	0.033** (0.014)	0.048*** (0.014)	0.015 (0.010)	0.060*** (0.013)
Education Level				
Completed High School	0.200** (0.084)	-0.204* (0.108)	----	----
Post school Certificate	0.110 (0.094)	-0.242** (0.100)	----	----
Tertiary Qualification	0.061 (0.107)	-0.197* (0.113)	----	----
Major Statistical Region				
Balance NSW & ACT	-0.035 (0.127)	0.082 (0.113)	-0.047 (0.128)	0.222*** (0.080)
Melbourne	-0.148 (0.115)	0.251*** (0.078)	0.011 (0.119)	0.009 (0.117)
Balance VIC & TAS	-0.233 (0.152)	-0.280 (0.181)	-0.014 (0.132)	-0.172 (0.210)
Brisbane	-0.109 (0.136)	0.250*** (0.091)	0.237*** (0.037)	0.114 (0.114)
Balance QLD & NT	0.012 (0.125)	-0.158 (0.151)	0.059 (0.111)	0.018 (0.147)
South Australia	-0.340*** (0.131)	-0.256* (0.139)	0.111 (0.094)	-0.000 (0.151)
Western Australia	0.170 (0.105)	0.004 (0.123)	0.138 (0.093)	0.063 (0.123)
Remoteness Area				
Inner Regional	-0.188* (0.107)	0.060 (0.121)	0.035 (0.082)	-0.067 (0.127)
Outer Regional & Remote	-0.211* (0.122)	0.153 (0.105)	0.014 (0.102)	-0.160 (0.150)
Country of Birth				
Other English Speaking	0.030 (0.169)	0.045 (0.164)	0.193*** (0.051)	0.150 (0.118)
Non-English Speaking	-0.035 (0.139)	-0.071 (0.169)	0.017 (0.167)	-0.339* (0.199)
Personality				
Extroversion	-0.065** (0.032)	0.103*** (0.036)	-0.048* (0.029)	-0.015 (0.035)

Agreeableness	0.078*	-0.035	0.022	0.001
	(0.042)	(0.042)	(0.049)	(0.042)
Conscientiousness	0.031	-0.001	0.022	0.122***
	(0.033)	(0.035)	(0.031)	(0.037)
Neuroticism	-0.025	0.012	0.061**	0.104***
	(0.035)	(0.040)	(0.030)	(0.037)
Openness	-0.006	-0.027	0.114***	0.010
	(0.038)	(0.033)	(0.038)	(0.036)
Background Characteristics				
Relationship with Parents	0.050***	0.026	-0.010	0.003
	(0.017)	(0.020)	(0.018)	(0.021)
Log relative HH income	0.024	-0.003	0.096	0.081
	(0.061)	(0.059)	(0.062)	(0.067)
Lived with both parents	0.230**	0.184*	0.095	-0.034
	(0.100)	(0.107)	(0.097)	(0.122)
Parents Highest Education				
Completed High School	0.091	0.021	0.225***	0.178**
	(0.141)	(0.121)	(0.036)	(0.076)
Post school Certificate	-0.051	-0.018	0.249***	-0.043
	(0.086)	(0.096)	(0.072)	(0.107)
Tertiary Qualification	-0.118	-0.080	0.237***	0.177*
	(0.110)	(0.097)	(0.072)	(0.096)
Observations	692	758	692	758
Pseudo R-squared	0.188	0.150	0.257	0.242

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Omitted variables; left home aged 19-20, has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, parents did not complete high school. Both the coupling regressions and educational achievement models, estimated using probit models, robust standard errors clustered at individual level and marginal effects presented.

The third observation, which I can make from Table 5.14 above, is that the personality traits of the individual are important for both determining whether the individual has a partner and whether or not they complete education. This is definitely expected, as there will be some personality types which are more or less attractive to potential partners. There will also be personality types which are more or less interested in completing high levels of education. Interestingly, the personality effects are different for both males and females; the size of these effects can be seen in the Table 5.14 above.

The fourth observation which I make from Table 5.14 above is about the relative importance the parental control variables have on the social outcomes. As expected, individuals who grew up living with both parents are more likely to be in a relationship. This is the case for both males and females and may be due to the norms which an individual develops from observing their parents. Males and females are approximately 18% and 23%

more likely to have a partner respectively, if they lived with both parents. The level of education an individual's parents have is especially important in determining whether or not they complete education beyond the end of high school. This effect is especially strong for females. This could be due to an ability effect or through norms the parents set up relating to the importance of completing education. Given these parental effects are so strong, the social outcomes of the individual are not examined using the extended sample, due to some of the parental variables not being available.

The final observation which I can make from the regressions presented in Table 5.14 above, is how relatively unimportant statistical region, remoteness of location and country of birth are in determining the social outcomes examined. It may be the case that these variables do not affect coupling or educational achievement, or due to the relatively small sample there is insufficient variation to observe statistically significant effects.

Overall, these five observations which I have discussed above add to the validity of the model, as the coefficients expected sign or an explanation has been given to explain why the variable has a certain effect. This allows me to be confident when describing the lower rates of partnering, women who leave their parents' home later than the average experience.

5.5. Summary

In this chapter, I have presented a vast range of regression results. I started by examining which characteristics of the individual and their background influence the age at which they decide to leave their parents' home. Then I examined whether or not the age an individual leaves home influences their labour market and social outcomes, in later waves of the HILDA survey. In the following paragraphs, I summarize the main findings of the regressions, which have been presented in the previous four sections.

First, I observed that the age men and women decide to leave home is influenced by several characteristics of the individual and their upbringing. The regression analysis presented in this section was able to show that; where the child lives, their relationship with parents, country of birth, and some household characteristics and personality traits, are all statistically significant in determining at what age a child leaves home. The findings here are similar to work which has been done previously in other countries especially that individuals

who live with both parents remain at home longer. Similarly, having a better relationship with ones parents leads to living at home for longer. Thus, it is necessary to include these variables in the labour market and social outcomes regression analysis, to avoid omitted variables bias.

Second, from the estimates of the main sample of individuals who left their parents' home between waves two and seven of the HILDA survey, I observe that the age individuals leave home has no statistically significant impact on employment status. This is the case for both males and females and for the three measures of home leaving age; the continuous variable, a zero/one dummy variable and the four categories of home leaving age. However, there was some weak evidence to suggest that females who left home very young (15-18), are less likely to be in paid employment than the reference category (19-20). There is also weak evidence to suggest men who leave home later are more likely to be in paid employment, than men who left home at younger ages.

As such, I have tested these two observations with a larger sample. This larger sample includes individuals who left their parents' home prior to the first wave of the HILDA survey. However, there are two major weaknesses of using the extended sample; using retrospective questions and the reduction in availability of parental control variables. When these results are tested using this larger sample, I am unable to confirm the marginal effects observed using the main sample. Thus, I am able to confidently state from the evidence available in the HILDA dataset, that there are no short-run employment costs associated with leaving home at different ages.

Third, after observing that the age Australian children leave home does not have a statistically significant impact on their employment status later in life, I examine whether this decision influences the quality of job obtained. To test the quality of jobs I use the real hourly wage rate of the individual, this is a commonly used outcome variable in labour economic analysis. From the analysis, which is performed on the main sample, I observe some evidence to suggest that females who are old leavers (21-22) may earn lower wages than females in the reference category (19-20). However, these estimates are not consistent enough across the model specifications to confidently state how females' wages are affected by the age they left home. In the males' analysis, none of the estimates were statistically significant although, the signs and magnitudes were consistent. Thus, it is worth further investigation using the extended sample although, caution is needed when using this sample for the same reasons as were the case in the employment analysis.

These two conflicting observations were tested using the robustness sample. The results from the analysis confirmed the observation that females who left home aged 21 or 22 earn statistically significantly lower wages than females who left home aged 19 or 20. Whilst, at the same time confirming the fact that there is no statistically significant differences in hourly wage rates males earn based on when they leave home. This effect on females' wages is interesting as it only affects females who left home between 21 and 22 and not those who left home older than this. This may be because females whose home leaving age is recorded as older than 23, may have actually left home prior to this. This concern has been discussed in previous sections.

Fourth, the analysis performed on the effect that the age Australian children leave home has on social outcomes provides a few interesting observations. The first of which is that females who leave home later are less likely to have a partner (married or de-facto) in later waves of the HILDA survey. This finding can be seen as weakly significant in the continuous model, but more so in the zero/one dummy variable and in the four categories of home leaving age. The main difference in coupling rates of females is coming from those who left home aged 21-22 being much less likely to have a partner than the reference group of leaving home between 19 and 20. The findings for men are inconclusive, with the only coefficient that I presented being statistically significant is that of the individuals who left home aged 15-18, being less likely to have a partner than the reference category.

There is also very little evidence to suggest that the age individuals leave home has any effect on their educational attainment. Only females who left home very late (23-28), were more likely than the reference group to hold a qualification beyond high school education. Interestingly, the male linear model suggested that leaving home at older ages may lead to higher educational achievement. However, when this was examined using the other measures of home leaving age, the effects are no longer statistically significant. These insignificant findings for the social outcome models may be due to the relatively small sample size. As I discussed above, I do not feel confident examining the social outcomes using the extended sample due to the lack of parental variables available for the individuals who left home prior to the first wave of the HILDA survey. This is due to the relative importance of parental variables in determining whether the child couples and especially the educational achievement of the individuals.

Combined, these observations indicate that females who remain in the parental home longer than average are worse off in later waves of the HILDA survey. These females have a lower hourly wage rate and are less likely to be in a relationship (married or de-facto). Obviously, having a lower hourly wage is a bad thing and assuming being in a relationship is good; this is a fair assumption given the effort individuals place in finding the right partner, having a lower probability of being in a relationship is also bad.

6. Conclusion

In the past five chapters, I have examined the questions of what influences Australian youths to leave their parents' home at different ages and what effect the age that an individual leaves home has on labour market and social outcomes. I began this thesis by conducting a comprehensive summary of the literature which relates to the age which individuals leave their parents' home. Following this, I provided a detailed description of the HILDA survey and data which is used in this thesis. Specific focus is placed on how the main sample of individuals who left their parents' home between waves two and seven of the HILDA survey is created, this relies on the ability to track all individuals who were originally in the household and not just a household head. After this, I described how the econometric models were estimated, being built up to include a wide range of control variables. Then these models were estimated separately for males and females, using three different classifications of home leaving age. These are, a continuous variable, a zero/one dummy variable that separates the individuals into a 20 and younger group and an over 20 group. The third home leaving age measure splits the individuals into four categories; a young leavers group (15-18), the common ages (19-20), late leavers (21-22) and very late leavers (23-28).

The analysis which is performed in this thesis contributes to the home leaving age literature by examining whether the age that a child leaves impacts their outcomes later in life. This exploits a gap in the existing literature which has predominately been focused on the costs related to leaving the parental home to set up independent living (Cobb-Clark 2008), why individuals leave home (Billari and Liefbroer 2007), what characteristics cause individuals to leave home at different ages (Mitchell et al. 1989) and how these have changed overtime (Flatau et al. 2007). This study fills the gap interestingly because the existing literature only provides evidence that leaving home is a costly process, therefore individuals may be delaying making this leap. However, this study examines whether there is an optimal age to leave the parental home by examining the future outcomes of the individual. This provides a potential benefit individuals may want to consider when contemplating leaving home, this needs to be balanced against the actual cost of leaving home.

I first examined what characteristics of the individual and their background influence the age which they decide to leave their parents' home. I estimated these models separately for males and females. For the regression estimates presented in Tables 5.1 and 5.2, we were

able to observe similar trends to those which can be observed in the existing literature. The main observations which can be made are that youths who grew up in more rural areas, outside a major city tend to leave their parents' home at younger ages. I also observed that the characteristics of the child's upbringing had a large influence in the determining the age which they decided to leave their parents' home. These include individuals who lived with both parents choosing to remain living with their parents for longer, the size of the household and relative income level have the expected negative and positive effects on home leaving age. An interesting point of difference compared to the existing literature is the inclusion of a measure of the quality of the child parent relationship. The regression estimates suggest that the child's self-assessed quality of the relationship they have with their parents, influences the age that females leave home in a greater way than is the case for males. However, for both genders those individuals who have better relationships with their parents leave home at later ages.

The second set of analysis which I performed examined the labour market costs associated with leaving home at different ages. There are two samples of individuals used to perform this analysis, first, a sample of individuals who I observe leaving their parents' home between waves two and seven of the HILDA survey. Then these findings were checked using an extended sample to include some individuals who left home prior to the first wave of the HILDA survey. I was able to observe that the age which a young man chooses to leave home has no statistically significant impact on his employment or earnings potential. These observations were robust regardless of model specification and how the home leaving variable was defined.

How the labour market outcomes of females are affected by the age which they choose to leave home is more interesting. Like was the case for men, I observed no statistically significant impact on employment in later waves of the HILDA survey. However, I was able to observe a marginally statistically significant effect of home leaving age on the hourly wage rate a female receives. When the home leaving age is included in the regressions, using a continuous control variable there is no statistically significant impact on hourly wage rate. However, when I break the females into home leaving age categories, I can observe that females who leave home after the median age earn lower hourly wage rates and the majority of this impact is driven by the females who leave just after the median age (21-22), compared to those females who leave home just before the median age (19-20).

The third and final set of analysis which is presented, examines whether the age an individual decides to leave home has any impact on social outcomes of the individual in later waves of the HILDA survey. The social outcomes which I chose to examine were the likelihood of coupling and completing any educational qualification beyond the final year of high school. Similar to the findings of the labour market analysis, I observe no statistically significant impact of the age that men leave the parental home on either of their social outcomes. More interestingly, females who left their parents' home later had a lower probability of being in a relationship, although no education effect was observed.

Finally, I need to discuss the limitations of this study and how this area of research could be extended in the future. The first limitation of this study is the relatively small sample size, which may cause estimates to be imprecisely estimated. A second limitation of this study is that I do not have any information about the main reason why an individual left their parents' home. This would be useful to include as someone who leaves home to complete education at 19 may be different that someone who leaves home at 19 to live with their partner. In the future it could be interesting to perform an analysis similar to this, using data from another country to examine whether these results are unique to Australia. It would also be interesting to re-examine these questions in an Australian context, using a dataset which has a large number of people leaving the parental home.

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Appendix

Female employment

Table A.1: Female employment continuous home leaving age

VARIABLES	(1)	(2)	(3)	(4)	(5)
Age Left Home	0.010 (0.015)	-0.000 (0.016)	-0.005 (0.016)	0.011 (0.019)	0.000 (0.020)
Age	-0.012 (0.015)	-0.017 (0.015)	-0.009 (0.017)	-0.029 (0.018)	-0.021 (0.020)
Married		0.011 (0.047)	0.025 (0.049)	0.020 (0.051)	0.041 (0.055)
Education Level					
Completed High School		0.221*** (0.071)	0.236*** (0.072)	0.219*** (0.076)	0.250*** (0.074)
Post school Certificate		0.178** (0.077)	0.166** (0.083)	0.151* (0.088)	0.146 (0.097)
Tertiary Qualification		0.347*** (0.080)	0.333*** (0.090)	0.366*** (0.087)	0.349*** (0.100)
Major Statistical Region					
Balance NSW & ACT		-0.164* (0.091)	-0.189** (0.096)	-0.243** (0.102)	-0.281** (0.111)
Melbourne		0.057 (0.068)	0.039 (0.074)	-0.034 (0.080)	-0.044 (0.087)
Balance VIC & TAS		-0.036 (0.118)	-0.017 (0.116)	-0.097 (0.135)	-0.102 (0.140)
Brisbane		-0.033 (0.100)	-0.060 (0.107)	-0.066 (0.111)	-0.093 (0.121)
Balance QLD & NT		-0.082 (0.105)	-0.103 (0.108)	-0.174 (0.111)	-0.216* (0.118)
South Australia		-0.055 (0.099)	-0.057 (0.104)	-0.104 (0.110)	-0.107 (0.120)
Western Australia		0.107 (0.074)	0.115 (0.073)	0.000 (0.089)	0.031 (0.091)
Remoteness Area					
Inner Regional		-0.021 (0.082)	-0.028 (0.084)	-0.027 (0.089)	-0.024 (0.091)
Outer Regional & Remote		-0.010 (0.092)	0.000 (0.094)	0.028 (0.094)	0.042 (0.095)
Country of Birth					
Other English Speaking		-0.156 (0.114)	-0.187 (0.125)	-0.216 (0.152)	-0.282 (0.173)
Non-English Speaking		-0.040 (0.085)	-0.043 (0.088)	-0.006 (0.113)	-0.020 (0.114)
Personality					
Extroversion			0.016 (0.024)		0.031 (0.026)

Agreeableness			-0.004 (0.038)		-0.008 (0.039)
Conscientiousness			0.020 (0.026)		0.036 (0.028)
Neuroticism			-0.018 (0.023)		0.002 (0.027)
Openness			-0.025 (0.027)		-0.002 (0.030)
Background Characteristics					
Relationship with Parents				-0.011 (0.014)	-0.001 (0.014)
Log relative HH income				0.065 (0.045)	0.077* (0.045)
Lived with both parents				0.080 (0.069)	0.107 (0.080)
Parents Highest Education					
Completed High School				-0.058 (0.117)	-0.041 (0.141)
Post school Certificate				0.020 (0.078)	0.030 (0.082)
Tertiary Qualification				-0.083 (0.089)	-0.090 (0.097)
Year					
2006	-0.188 (0.141)	-0.174 (0.139)	-0.114 (0.135)	-0.149 (0.134)	-0.087 (0.127)
2007	-0.258* (0.148)	-0.212 (0.140)	-0.188 (0.141)	-0.143 (0.137)	-0.124 (0.136)
2008	-0.327** (0.147)	-0.285** (0.139)	-0.262* (0.138)	-0.210 (0.141)	-0.184 (0.137)
2009	-0.316** (0.154)	-0.265* (0.146)	-0.254* (0.148)	-0.206 (0.145)	-0.186 (0.148)
2010	-0.303* (0.163)	-0.251 (0.153)	-0.238 (0.156)	-0.188 (0.156)	-0.174 (0.162)
2011	-0.314* (0.163)	-0.255* (0.154)	-0.232 (0.158)	-0.167 (0.160)	-0.145 (0.166)
Observations	892	892	813	761	692
Pseudo R-squared	0.0102	0.0823	0.0799	0.113	0.122

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, parents did not complete high school, 2005. Models estimated using probit regression and marginal effects presented.

Table A.2: Female employment dummy home leaving age

VARIABLES	(1)	(2)	(3)	(4)	(5)
Left home older than 20	0.082 (0.058)	0.054 (0.060)	0.044 (0.060)	0.066 (0.069)	0.043 (0.068)
Age	-0.011 (0.011)	-0.022* (0.011)	-0.017 (0.013)	-0.026** (0.013)	-0.025* (0.014)
Married		0.016 (0.047)	0.030 (0.049)	0.024 (0.051)	0.046 (0.055)
Education Level					
Completed High School		0.218*** (0.072)	0.233*** (0.073)	0.213*** (0.078)	0.247*** (0.075)
Post school Certificate		0.173** (0.078)	0.161* (0.084)	0.145 (0.090)	0.144 (0.097)
Tertiary Qualification		0.341*** (0.081)	0.327*** (0.091)	0.357*** (0.089)	0.344*** (0.101)
Major Statistical Region					
Balance NSW & ACT		-0.163* (0.090)	-0.182* (0.095)	-0.251** (0.100)	-0.280** (0.109)
Melbourne		0.055 (0.068)	0.038 (0.074)	-0.035 (0.079)	-0.044 (0.087)
Balance VIC & TAS		-0.034 (0.118)	-0.013 (0.116)	-0.099 (0.135)	-0.101 (0.140)
Brisbane		-0.023 (0.099)	-0.049 (0.106)	-0.056 (0.110)	-0.080 (0.120)
Balance QLD & NT		-0.072 (0.103)	-0.089 (0.106)	-0.173 (0.110)	-0.211* (0.118)
South Australia		-0.040 (0.098)	-0.038 (0.103)	-0.097 (0.109)	-0.096 (0.119)
Western Australia		0.110 (0.073)	0.117 (0.072)	0.006 (0.088)	0.032 (0.090)
Remoteness Area					
Inner Regional		-0.024 (0.080)	-0.034 (0.083)	-0.023 (0.087)	-0.024 (0.090)
Outer Regional & Remote		-0.012 (0.091)	-0.004 (0.093)	0.030 (0.093)	0.042 (0.095)
Country of Birth					
Other English Speaking		-0.155 (0.113)	-0.190 (0.125)	-0.208 (0.149)	-0.277 (0.173)
Non-English Speaking		-0.040 (0.085)	-0.041 (0.087)	-0.007 (0.112)	-0.022 (0.115)
Personality					
Extroversion			0.015 (0.023)		0.030 (0.026)
Agreeableness			-0.004 (0.038)		-0.008 (0.039)
Conscientiousness			0.019 (0.026)		0.035 (0.028)

Neuroticism				-0.017 (0.023)	0.002 (0.026)
Openness				-0.024 (0.027)	-0.003 (0.029)
Background Characteristics					
Relationship with Parents				-0.010 (0.014)	-0.001 (0.014)
Log relative HH income				0.064 (0.045)	0.074* (0.045)
Lived with both parents				0.084 (0.068)	0.106 (0.080)
Parents Highest Education					
Completed High School				-0.047 (0.118)	-0.032 (0.142)
Post school Certificate				0.020 (0.078)	0.033 (0.081)
Tertiary Qualification				-0.077 (0.089)	-0.080 (0.098)
Year					
2006	-0.188 (0.140)	-0.174 (0.139)	-0.113 (0.135)	-0.151 (0.133)	-0.087 (0.126)
2007	-0.256* (0.146)	-0.204 (0.139)	-0.175 (0.139)	-0.144 (0.135)	-0.115 (0.133)
2008	-0.324** (0.143)	-0.272** (0.137)	-0.242* (0.135)	-0.214 (0.137)	-0.172 (0.132)
2009	-0.312** (0.147)	-0.249* (0.140)	-0.229 (0.141)	-0.213 (0.138)	-0.174 (0.137)
2010	-0.298* (0.154)	-0.229 (0.146)	-0.206 (0.148)	-0.194 (0.146)	-0.155 (0.148)
2011	-0.308** (0.151)	-0.229 (0.144)	-0.192 (0.146)	-0.174 (0.145)	-0.122 (0.146)
Observations	892	892	813	761	692
Pseudo R-squared	0.0128	0.0836	0.0806	0.114	0.122

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, parents did not complete high school, 2005. Models estimated using probit regression and marginal effects presented.

Table A.3: Female employment four categories of home leaving age

VARIABLES	(1)	(2)	(3)	(4)	(5)
Age Left Home					
15-18	-0.137 (0.084)	-0.157* (0.089)	-0.151 (0.093)	-0.232** (0.096)	-0.198* (0.104)
21-22	0.039 (0.062)	0.011 (0.064)	0.012 (0.066)	0.005 (0.073)	0.002 (0.077)
23-28	0.029 (0.083)	-0.035 (0.092)	-0.073 (0.094)	-0.034 (0.106)	-0.097 (0.113)
Age	-0.010 (0.014)	-0.017 (0.014)	-0.007 (0.015)	-0.023 (0.016)	-0.013 (0.018)
Married		0.010 (0.047)	0.022 (0.049)	0.020 (0.051)	0.043 (0.055)
Education Level					
Completed High School		0.216*** (0.072)	0.229*** (0.073)	0.218*** (0.076)	0.245*** (0.075)
Post school Certificate		0.164** (0.079)	0.152* (0.085)	0.142 (0.090)	0.138 (0.097)
Tertiary Qualification		0.341*** (0.081)	0.329*** (0.090)	0.369*** (0.087)	0.360*** (0.099)
Major Statistical Region					
Balance NSW & ACT		-0.151* (0.089)	-0.174* (0.093)	-0.226** (0.099)	-0.258** (0.110)
Melbourne		0.047 (0.068)	0.029 (0.074)	-0.051 (0.081)	-0.063 (0.088)
Balance VIC & TAS		-0.010 (0.116)	0.008 (0.113)	-0.057 (0.132)	-0.062 (0.138)
Brisbane		-0.035 (0.098)	-0.062 (0.104)	-0.076 (0.109)	-0.096 (0.118)
Balance QLD & NT		-0.058 (0.101)	-0.078 (0.104)	-0.151 (0.109)	-0.194* (0.117)
South Australia		-0.045 (0.096)	-0.048 (0.101)	-0.104 (0.108)	-0.107 (0.117)
Western Australia		0.115 (0.072)	0.125* (0.071)	0.003 (0.085)	0.040 (0.087)
Remoteness Area					
Inner Regional		-0.047 (0.081)	-0.056 (0.084)	-0.062 (0.088)	-0.060 (0.090)
Outer Regional & Remote		-0.039 (0.094)	-0.031 (0.096)	-0.007 (0.097)	0.014 (0.098)
Country of Birth					
Other English Speaking		-0.167 (0.113)	-0.198 (0.124)	-0.232 (0.150)	-0.288* (0.171)
Non-English Speaking		-0.044 (0.085)	-0.041 (0.087)	-0.024 (0.112)	-0.034 (0.115)
Personality					
Extroversion			0.011 (0.023)		0.026 (0.025)

Agreeableness				-0.002 (0.038)	-0.005 (0.039)
Conscientiousness				0.021 (0.025)	0.035 (0.027)
Neuroticism				-0.022 (0.023)	-0.004 (0.026)
Openness				-0.029 (0.027)	-0.013 (0.031)
Background Characteristics					
Relationship with Parents				-0.011 (0.013)	-0.003 (0.013)
Log relative HH income				0.059 (0.046)	0.072 (0.045)
Lived with both parents				0.084 (0.068)	0.096 (0.079)
Parents Highest Education					
Completed High School				-0.062 (0.119)	-0.044 (0.142)
Post school Certificate				0.007 (0.078)	0.027 (0.082)
Tertiary Qualification				-0.093 (0.087)	-0.088 (0.096)
Year					
2006	-0.187 (0.139)	-0.169 (0.138)	-0.104 (0.133)	-0.143 (0.132)	-0.075 (0.123)
2007	-0.262* (0.148)	-0.215 (0.140)	-0.190 (0.142)	-0.156 (0.138)	-0.132 (0.138)
2008	-0.330** (0.148)	-0.285** (0.140)	-0.262* (0.138)	-0.224 (0.141)	-0.195 (0.138)
2009	-0.313** (0.155)	-0.260* (0.146)	-0.250* (0.147)	-0.220 (0.146)	-0.200 (0.147)
2010	-0.297* (0.164)	-0.238 (0.153)	-0.228 (0.155)	-0.199 (0.157)	-0.186 (0.161)
2011	-0.309* (0.163)	-0.243 (0.154)	-0.223 (0.155)	-0.181 (0.159)	-0.160 (0.162)
Observations	892	892	813	761	692
Pseudo R-squared	0.0171	0.0893	0.0878	0.125	0.133

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; left home age 19-20, has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, parents did not complete high school, 2005. Models estimated using probit regression and marginal effects presented.

Male employment

Table A.4: Male employment continuous home leaving age

VARIABLES	(1)	(2)	(3)	(4)	(5)
Age Left Home	0.022* (0.013)	0.017 (0.012)	0.018 (0.012)	0.011 (0.013)	0.008 (0.013)
Age	0.001 (0.013)	-0.004 (0.011)	-0.003 (0.011)	-0.006 (0.012)	0.001 (0.012)
Married		0.176*** (0.034)	0.184*** (0.036)	0.144*** (0.037)	0.158*** (0.039)
Education Level					
Completed High School		0.099** (0.043)	0.131*** (0.038)	0.102** (0.044)	0.133*** (0.041)
Post school Certificate		0.138*** (0.043)	0.146*** (0.044)	0.132*** (0.048)	0.152*** (0.050)
Tertiary Qualification		0.181*** (0.040)	0.196*** (0.040)	0.198*** (0.045)	0.229*** (0.047)
Major Statistical Region					
Balance NSW & ACT		0.006 (0.076)	0.053 (0.068)	0.013 (0.076)	0.047 (0.070)
Melbourne		-0.012 (0.052)	0.008 (0.049)	0.027 (0.048)	0.021 (0.046)
Balance VIC & TAS		0.153*** (0.043)	0.137*** (0.044)	0.143*** (0.043)	0.130*** (0.043)
Brisbane		0.087* (0.049)	0.098** (0.046)	0.078 (0.052)	0.095** (0.047)
Balance QLD & NT		0.048 (0.066)	0.044 (0.063)	0.072 (0.064)	0.053 (0.062)
South Australia		-0.028 (0.071)	-0.004 (0.063)	-0.018 (0.073)	-0.015 (0.068)
Western Australia		0.019 (0.065)	0.017 (0.062)	0.034 (0.062)	0.012 (0.060)
Remoteness Area					
Inner Regional		-0.106 (0.070)	-0.086 (0.068)	-0.128 (0.082)	-0.093 (0.077)
Outer Regional & Remote		-0.073 (0.074)	-0.062 (0.074)	-0.120 (0.090)	-0.086 (0.087)
Country of Birth					
Other English Speaking		-0.000 (0.089)	0.051 (0.067)	-0.035 (0.101)	0.031 (0.076)
Non-English Speaking		-0.068 (0.074)	-0.023 (0.074)	-0.052 (0.076)	0.037 (0.065)
Personality					
Extroversion			-0.032* (0.018)		-0.033* (0.019)
Agreeableness			0.049*** (0.018)		0.042* (0.021)
Conscientiousness			-0.000 (0.017)		-0.015 (0.019)

Neuroticism				0.033*	0.005
				(0.017)	(0.018)
Openness				-0.033*	-0.037**
				(0.017)	(0.018)
Background Characteristics					
Relationship with Parents				-0.005	-0.004
				(0.009)	(0.009)
Log relative HH income				-0.027	-0.022
				(0.034)	(0.033)
Lived with both parents				0.083*	0.041
				(0.049)	(0.049)
Parents Highest Education					
Completed High School				0.091*	0.088*
				(0.053)	(0.050)
Post school Certificate				0.027	0.043
				(0.051)	(0.049)
Tertiary Qualification				-0.017	-0.005
				(0.055)	(0.053)
Year					
2006	-0.003	0.051	0.048	0.039	0.034
	(0.089)	(0.076)	(0.079)	(0.078)	(0.086)
2007	0.055	0.086	0.065	0.075	0.046
	(0.064)	(0.057)	(0.062)	(0.058)	(0.067)
2008	0.096	0.124**	0.104*	0.115**	0.086
	(0.065)	(0.057)	(0.060)	(0.057)	(0.065)
2009	0.088	0.121*	0.094	0.120*	0.090
	(0.072)	(0.064)	(0.070)	(0.064)	(0.073)
2010	0.075	0.113	0.091	0.120*	0.085
	(0.080)	(0.071)	(0.075)	(0.068)	(0.077)
2011	0.075	0.111	0.089	0.105	0.059
	(0.084)	(0.077)	(0.080)	(0.078)	(0.088)
Observations	957	955	872	822	758
Pseudo R-squared	0.0228	0.106	0.134	0.120	0.141

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, parents did not complete high school, 2005. Models estimated using probit regression and marginal effects presented.

Table A.5: Male employment dummy home leaving age

VARIABLES	(1)	(2)	(3)	(4)	(5)
Left home older than 20	0.058 (0.058)	0.061 (0.051)	0.092* (0.052)	0.043 (0.054)	0.056 (0.054)
Age	0.015* (0.008)	0.004 (0.008)	0.005 (0.007)	-0.001 (0.008)	0.003 (0.008)
Married		0.178*** (0.034)	0.183*** (0.036)	0.146*** (0.037)	0.161*** (0.039)
Education Level					
Completed High School		0.099** (0.043)	0.132*** (0.037)	0.102** (0.044)	0.134*** (0.040)
Post school Certificate		0.138*** (0.044)	0.146*** (0.043)	0.133*** (0.048)	0.153*** (0.049)
Tertiary Qualification		0.185*** (0.041)	0.201*** (0.040)	0.202*** (0.045)	0.233*** (0.047)
Major Statistical Region					
Balance NSW & ACT		0.001 (0.076)	0.049 (0.069)	0.008 (0.077)	0.044 (0.071)
Melbourne		-0.015 (0.053)	0.005 (0.049)	0.025 (0.048)	0.018 (0.046)
Balance VIC & TAS		0.155*** (0.041)	0.140*** (0.042)	0.145*** (0.042)	0.132*** (0.041)
Brisbane		0.080 (0.049)	0.091* (0.048)	0.073 (0.053)	0.092* (0.048)
Balance QLD & NT		0.042 (0.067)	0.039 (0.065)	0.067 (0.065)	0.051 (0.062)
South Australia		-0.033 (0.072)	-0.007 (0.065)	-0.024 (0.076)	-0.015 (0.069)
Western Australia		0.015 (0.065)	0.011 (0.063)	0.029 (0.063)	0.006 (0.061)
Remoteness Area					
Inner Regional		-0.108 (0.071)	-0.088 (0.070)	-0.127 (0.082)	-0.094 (0.079)
Outer Regional & Remote		-0.073 (0.074)	-0.060 (0.075)	-0.117 (0.089)	-0.085 (0.086)
Country of Birth					
Other English Speaking		-0.012 (0.089)	0.044 (0.066)	-0.044 (0.101)	0.030 (0.074)
Non-English Speaking		-0.071 (0.075)	-0.023 (0.072)	-0.054 (0.076)	0.037 (0.063)
Personality					
Extroversion			-0.031* (0.018)		-0.033* (0.019)
Agreeableness			0.049*** (0.018)		0.042** (0.021)
Conscientiousness			-0.000 (0.017)		-0.015 (0.018)

Neuroticism			0.035**		0.006
			(0.017)		(0.018)
Openness			-0.035**		-0.037**
			(0.017)		(0.018)
Background Characteristics					
Relationship with Parents				-0.005	-0.005
				(0.010)	(0.009)
Log relative HH income				-0.024	-0.020
				(0.033)	(0.032)
Lived with both parents				0.079	0.033
				(0.048)	(0.047)
Parents Highest Education					
Completed High School				0.092*	0.086*
				(0.052)	(0.051)
Post school Certificate				0.031	0.047
				(0.050)	(0.048)
Tertiary Qualification				-0.015	-0.003
				(0.054)	(0.053)
Year					
2006	-0.009	0.048	0.045	0.038	0.033
	(0.090)	(0.077)	(0.081)	(0.079)	(0.086)
2007	0.044	0.080	0.058	0.071	0.044
	(0.065)	(0.059)	(0.064)	(0.058)	(0.067)
2008	0.080	0.116**	0.094	0.110*	0.084
	(0.067)	(0.058)	(0.062)	(0.056)	(0.064)
2009	0.063	0.108*	0.080	0.113*	0.089
	(0.074)	(0.065)	(0.070)	(0.062)	(0.069)
2010	0.040	0.096	0.074	0.110*	0.084
	(0.080)	(0.070)	(0.074)	(0.065)	(0.072)
2011	0.029	0.087	0.066	0.090	0.058
	(0.082)	(0.074)	(0.077)	(0.072)	(0.079)
Observations	957	955	872	822	758
Pseudo R-squared	0.0193	0.106	0.136	0.120	0.143

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, parents did not complete high school, 2005. Models estimated using probit regression and marginal effects presented.

Table A.6: Male employment four categories of home leaving age

VARIABLES	(1)	(2)	(3)	(4)	(5)
Age Left Home					
15-18	-0.048 (0.077)	-0.013 (0.070)	0.029 (0.059)	-0.008 (0.067)	0.035 (0.054)
21-22	0.024 (0.060)	0.036 (0.051)	0.067 (0.046)	0.030 (0.055)	0.046 (0.050)
23-28	0.089 (0.068)	0.090 (0.057)	0.128** (0.057)	0.067 (0.063)	0.103* (0.062)
Age	0.008 (0.010)	-0.001 (0.009)	0.001 (0.008)	-0.004 (0.009)	-0.002 (0.009)
Married		0.178*** (0.035)	0.188*** (0.036)	0.145*** (0.037)	0.164*** (0.040)
Education Level					
Completed High School		0.100** (0.043)	0.136*** (0.037)	0.101** (0.044)	0.136*** (0.039)
Post school Certificate		0.140*** (0.044)	0.151*** (0.043)	0.133*** (0.048)	0.156*** (0.049)
Tertiary Qualification		0.183*** (0.041)	0.201*** (0.040)	0.200*** (0.045)	0.233*** (0.047)
Major Statistical Region					
Balance NSW & ACT		0.010 (0.073)	0.058 (0.065)	0.016 (0.073)	0.055 (0.067)
Melbourne		-0.007 (0.051)	0.012 (0.048)	0.032 (0.047)	0.027 (0.045)
Balance VIC & TAS		0.154*** (0.042)	0.140*** (0.041)	0.145*** (0.042)	0.134*** (0.040)
Brisbane		0.085* (0.049)	0.096** (0.047)	0.077 (0.052)	0.097** (0.046)
Balance QLD & NT		0.050 (0.067)	0.047 (0.065)	0.075 (0.062)	0.062 (0.059)
South Australia		-0.021 (0.070)	0.007 (0.061)	-0.013 (0.071)	0.002 (0.063)
Western Australia		0.022 (0.063)	0.018 (0.062)	0.034 (0.061)	0.013 (0.060)
Remoteness Area					
Inner Regional		-0.111 (0.071)	-0.091 (0.070)	-0.135* (0.081)	-0.103 (0.078)
Outer Regional & Remote		-0.074 (0.075)	-0.066 (0.075)	-0.122 (0.090)	-0.094 (0.086)
Country of Birth					
Other English Speaking		0.001 (0.090)	0.050 (0.069)	-0.034 (0.102)	0.033 (0.078)
Non-English Speaking		-0.070 (0.073)	-0.025 (0.073)	-0.050 (0.075)	0.044 (0.061)
Personality					
Extroversion			-0.035** (0.017)		-0.036** (0.018)

Agreeableness			0.051***		0.045**
			(0.018)		(0.021)
Conscientiousness			0.002		-0.014
			(0.017)		(0.019)
Neuroticism			0.034**		0.006
			(0.017)		(0.018)
Openness			-0.035**		-0.038**
			(0.017)		(0.018)
Background Characteristics					
Relationship with Parents				-0.005	-0.004
				(0.010)	(0.009)
Log relative HH income				-0.027	-0.023
				(0.033)	(0.032)
Lived with both parents				0.082*	0.034
				(0.049)	(0.047)
Parents Highest Education					
Completed High School				0.087	0.082
				(0.054)	(0.053)
Post school Certificate				0.031	0.052
				(0.051)	(0.048)
Tertiary Qualification				-0.017	-0.005
				(0.055)	(0.053)
Year					
2006	-0.007	0.049	0.046	0.038	0.036
	(0.090)	(0.076)	(0.080)	(0.078)	(0.085)
2007	0.051	0.085	0.064	0.075	0.052
	(0.064)	(0.057)	(0.062)	(0.057)	(0.064)
2008	0.090	0.124**	0.104*	0.117**	0.096
	(0.065)	(0.056)	(0.059)	(0.055)	(0.060)
2009	0.078	0.119*	0.092	0.121**	0.103
	(0.071)	(0.063)	(0.067)	(0.060)	(0.066)
2010	0.058	0.108	0.086	0.121*	0.101
	(0.078)	(0.069)	(0.072)	(0.063)	(0.068)
2011	0.054	0.103	0.081	0.104	0.078
	(0.080)	(0.073)	(0.075)	(0.070)	(0.076)
Observations	957	955	872	822	758
Pseudo R-squared	0.0229	0.108	0.139	0.121	0.146

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; left home age 19-20, has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, parents did not complete high school, 2005. Models estimated using probit regression and marginal effects presented.

Female hourly wage rate

Table A.7: Female hourly wage rate continuous home leaving age

VARIABLES	(1)	(2)	(3)	(4)	(5)
Age Left Home	0.027** (0.012)	-0.000 (0.011)	-0.003 (0.011)	-0.003 (0.012)	-0.011 (0.013)
Work Experience	0.025** (0.011)	0.033*** (0.011)	0.031*** (0.012)	0.039*** (0.012)	0.040*** (0.012)
Married		0.036 (0.037)	0.043 (0.040)	0.036 (0.043)	0.028 (0.046)
Education Level					
Completed High School		0.273*** (0.052)	0.288*** (0.063)	0.243*** (0.058)	0.252*** (0.070)
Post school Certificate		0.220*** (0.054)	0.233*** (0.065)	0.206*** (0.058)	0.220*** (0.070)
Tertiary Qualification		0.432*** (0.047)	0.437*** (0.063)	0.431*** (0.058)	0.421*** (0.074)
Major Statistical Region					
Balance NSW & ACT		0.029 (0.076)	0.069 (0.084)	0.007 (0.085)	0.053 (0.092)
Melbourne		-0.057 (0.069)	-0.027 (0.076)	-0.109* (0.066)	-0.095 (0.076)
Balance VIC & TAS		-0.073 (0.089)	-0.067 (0.094)	-0.107 (0.101)	-0.092 (0.105)
Brisbane		-0.033 (0.092)	-0.003 (0.088)	-0.147 (0.095)	-0.139 (0.090)
Balance QLD & NT		-0.057 (0.083)	-0.048 (0.087)	-0.099 (0.090)	-0.078 (0.094)
South Australia		-0.117 (0.083)	-0.105 (0.099)	-0.167** (0.072)	-0.179** (0.086)
Western Australia		0.066 (0.079)	0.062 (0.079)	-0.009 (0.087)	0.007 (0.095)
Remoteness Area					
Inner Regional		-0.057 (0.051)	-0.040 (0.058)	-0.048 (0.065)	-0.055 (0.069)
Outer Regional & Remote		0.036 (0.073)	0.063 (0.073)	0.038 (0.082)	0.040 (0.084)
Country of Birth					
Other English Speaking		-0.174* (0.102)	-0.154* (0.082)	-0.052 (0.102)	-0.073 (0.100)
Non-English Speaking		0.124 (0.112)	0.118 (0.108)	0.246** (0.111)	0.211* (0.110)
Personality					
Extroversion			0.041* (0.023)		0.027 (0.027)
Agreeableness			0.022 (0.028)		0.025 (0.032)
Conscientiousness			0.008 (0.021)		0.007 (0.021)

Neuroticism			-0.026 (0.023)		-0.027 (0.025)
Openness			0.003 (0.024)		0.007 (0.024)
Background Characteristics					
Relationship with Parents				0.013 (0.012)	0.014 (0.014)
Log relative HH income				-0.035 (0.029)	-0.052* (0.029)
Lived with both parents				-0.015 (0.055)	0.038 (0.055)
Parents Highest Education					
Completed High School				0.173 (0.121)	0.067 (0.129)
Post school Certificate				-0.047 (0.057)	-0.036 (0.059)
Tertiary Qualification				-0.011 (0.076)	0.013 (0.077)
Year					
2006	-0.051 (0.089)	-0.001 (0.081)	-0.015 (0.077)	0.038 (0.077)	0.013 (0.074)
2007	-0.069 (0.087)	-0.010 (0.077)	-0.016 (0.067)	0.001 (0.073)	-0.003 (0.067)
2008	-0.025 (0.093)	0.016 (0.082)	0.001 (0.075)	0.027 (0.078)	0.003 (0.077)
2009	-0.027 (0.098)	0.028 (0.083)	-0.007 (0.078)	0.050 (0.079)	0.011 (0.077)
2010	0.030 (0.100)	0.085 (0.090)	0.064 (0.084)	0.092 (0.086)	0.054 (0.083)
2011	0.004 (0.101)	0.051 (0.088)	0.034 (0.086)	0.056 (0.086)	0.020 (0.088)
Constant	2.445*** (0.245)	2.595*** (0.248)	2.412*** (0.344)	2.949*** (0.392)	3.021*** (0.435)
Observations	479	479	451	414	386
R-squared	0.116	0.263	0.253	0.340	0.316
Number of individuals	173	173	164	141	132

Notes: Models estimated using OLS, robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, parents did not complete high school, 2005.

Table A.8: Female hourly wage rate dummy home leaving age

VARIABLES	(1)	(2)	(3)	(4)	(5)
Left home older than 20	0.038 (0.047)	-0.067 (0.048)	-0.076 (0.049)	-0.073 (0.049)	-0.100** (0.049)
Work Experience	0.039*** (0.009)	0.037*** (0.010)	0.034*** (0.009)	0.041*** (0.010)	0.041*** (0.010)
Married		0.025 (0.037)	0.034 (0.038)	0.023 (0.042)	0.016 (0.044)
Education Level					
Completed High School		0.282*** (0.053)	0.302*** (0.065)	0.251*** (0.059)	0.267*** (0.070)
Post school Certificate		0.233*** (0.055)	0.249*** (0.067)	0.220*** (0.060)	0.242*** (0.071)
Tertiary Qualification		0.456*** (0.050)	0.462*** (0.067)	0.456*** (0.061)	0.453*** (0.075)
Major Statistical Region					
Balance NSW & ACT		0.029 (0.074)	0.079 (0.082)	0.013 (0.086)	0.076 (0.092)
Melbourne		-0.053 (0.068)	-0.023 (0.075)	-0.104 (0.066)	-0.085 (0.076)
Balance VIC & TAS		-0.077 (0.089)	-0.063 (0.095)	-0.102 (0.102)	-0.073 (0.106)
Brisbane		-0.045 (0.093)	-0.009 (0.086)	-0.159* (0.094)	-0.144 (0.088)
Balance QLD & NT		-0.069 (0.082)	-0.055 (0.085)	-0.099 (0.091)	-0.070 (0.095)
South Australia		-0.134* (0.075)	-0.121 (0.090)	-0.177*** (0.068)	-0.186** (0.081)
Western Australia		0.063 (0.080)	0.061 (0.078)	-0.011 (0.089)	0.006 (0.098)
Remoteness Area					
Inner Regional		-0.054 (0.052)	-0.041 (0.059)	-0.054 (0.067)	-0.065 (0.072)
Outer Regional & Remote		0.040 (0.074)	0.067 (0.074)	0.032 (0.084)	0.032 (0.086)
Country of Birth					
Other English Speaking		-0.179* (0.103)	-0.165* (0.084)	-0.072 (0.104)	-0.097 (0.099)
Non-English Speaking		0.127 (0.110)	0.117 (0.104)	0.243** (0.111)	0.197* (0.109)
Personality					
Extroversion			0.042* (0.022)		0.031 (0.027)
Agreeableness			0.020 (0.028)		0.024 (0.031)
Conscientiousness			0.005 (0.021)		0.003 (0.021)

Neuroticism			-0.026 (0.022)		-0.029 (0.025)
Openness			0.007 (0.024)		0.012 (0.024)
Background Characteristics					
Relationship with Parents				0.012 (0.011)	0.013 (0.013)
Log relative HH income				-0.032 (0.030)	-0.048 (0.030)
Lived with both parents				-0.023 (0.055)	0.030 (0.055)
Parents Highest Education					
Completed High School				0.149 (0.121)	0.028 (0.124)
Post school Certificate				-0.055 (0.058)	-0.053 (0.059)
Tertiary Qualification				-0.026 (0.077)	-0.015 (0.076)
Year					
2006	-0.052 (0.092)	-0.001 (0.080)	-0.017 (0.076)	0.037 (0.076)	0.008 (0.073)
2007	-0.092 (0.089)	-0.015 (0.077)	-0.022 (0.067)	-0.002 (0.073)	-0.007 (0.068)
2008	-0.059 (0.093)	0.004 (0.081)	-0.011 (0.075)	0.019 (0.078)	-0.003 (0.078)
2009	-0.078 (0.095)	0.009 (0.080)	-0.024 (0.078)	0.037 (0.079)	0.002 (0.080)
2010	-0.029 (0.099)	0.061 (0.088)	0.042 (0.082)	0.074 (0.084)	0.040 (0.082)
2011	-0.069 (0.097)	0.022 (0.084)	0.008 (0.082)	0.032 (0.083)	0.004 (0.086)
Constant	2.947*** (0.094)	2.617*** (0.096)	2.375*** (0.221)	2.897*** (0.318)	2.832*** (0.350)
Observations	479	479	451	414	386
R-squared	0.096	0.268	0.260	0.345	0.324
Number of individuals	173	173	164	141	132

Notes: Models estimated using OLS, robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, parents did not complete high school, 2005.

Table A.9: Female hourly wage rate four categories of home leaving age

VARIABLES	(1)	(2)	(3)	(4)	(5)
Age Left Home					
15-18	-0.022 (0.073)	-0.044 (0.056)	-0.059 (0.060)	-0.041 (0.074)	-0.079 (0.076)
21-22	-0.031 (0.055)	-0.108* (0.057)	-0.124** (0.060)	-0.126** (0.057)	-0.173*** (0.059)
23-28	0.150** (0.067)	-0.004 (0.062)	-0.018 (0.062)	0.019 (0.059)	-0.021 (0.061)
Work Experience	0.024** (0.010)	0.028*** (0.010)	0.026*** (0.010)	0.029*** (0.010)	0.029*** (0.010)
Married		0.018 (0.037)	0.030 (0.038)	0.018 (0.041)	0.011 (0.043)
Education Level					
Completed High School		0.297*** (0.052)	0.328*** (0.060)	0.264*** (0.061)	0.297*** (0.069)
Post school Certificate		0.248*** (0.054)	0.272*** (0.061)	0.239*** (0.061)	0.273*** (0.067)
Tertiary Qualification		0.457*** (0.048)	0.476*** (0.060)	0.464*** (0.061)	0.482*** (0.071)
Major Statistical Region					
Balance NSW & ACT		0.036 (0.073)	0.098 (0.083)	0.021 (0.084)	0.104 (0.087)
Melbourne		-0.054 (0.068)	-0.017 (0.076)	-0.096 (0.065)	-0.071 (0.076)
Balance VIC & TAS		-0.066 (0.090)	-0.043 (0.098)	-0.077 (0.102)	-0.033 (0.105)
Brisbane		-0.039 (0.096)	0.004 (0.088)	-0.161* (0.097)	-0.136 (0.087)
Balance QLD & NT		-0.049 (0.086)	-0.030 (0.090)	-0.068 (0.099)	-0.033 (0.099)
South Australia		-0.114 (0.075)	-0.106 (0.089)	-0.151** (0.070)	-0.169** (0.081)
Western Australia		0.057 (0.078)	0.062 (0.077)	-0.033 (0.086)	-0.013 (0.095)
Remoteness Area					
Inner Regional		-0.063 (0.052)	-0.056 (0.059)	-0.070 (0.068)	-0.093 (0.071)
Outer Regional & Remote		0.019 (0.073)	0.049 (0.074)	-0.003 (0.086)	-0.001 (0.087)
Country of Birth					
Other English Speaking		-0.220** (0.102)	-0.213*** (0.081)	-0.131 (0.117)	-0.160 (0.102)
Non-English Speaking		0.095 (0.110)	0.081 (0.104)	0.208* (0.110)	0.156 (0.108)
Personality					
Extroversion			0.047** (0.021)		0.036 (0.025)

Agreeableness				0.015 (0.026)	0.018 (0.030)
Conscientiousness				0.000 (0.020)	-0.008 (0.021)
Neuroticism				-0.029 (0.022)	-0.028 (0.024)
Openness				0.008 (0.023)	0.017 (0.023)
Background Characteristics					
Relationship with Parents				0.006 (0.012)	0.009 (0.013)
Log relative HH income				-0.026 (0.030)	-0.041 (0.030)
Lived with both parents				-0.021 (0.055)	0.036 (0.056)
Parents Highest Education					
Completed High School				0.113 (0.121)	-0.016 (0.123)
Post school Certificate				-0.082 (0.063)	-0.092 (0.064)
Tertiary Qualification				-0.055 (0.083)	-0.063 (0.079)
Year					
2006	-0.050 (0.091)	-0.001 (0.081)	-0.021 (0.076)	0.034 (0.077)	0.001 (0.073)
2007	-0.057 (0.088)	0.003 (0.075)	-0.008 (0.066)	0.022 (0.071)	0.014 (0.066)
2008	-0.016 (0.095)	0.027 (0.081)	0.008 (0.076)	0.054 (0.078)	0.030 (0.079)
2009	-0.016 (0.099)	0.043 (0.083)	0.006 (0.080)	0.084 (0.081)	0.049 (0.082)
2010	0.042 (0.102)	0.101 (0.089)	0.078 (0.084)	0.136 (0.085)	0.099 (0.084)
2011	0.012 (0.102)	0.068 (0.088)	0.049 (0.086)	0.099 (0.086)	0.069 (0.089)
Constant	2.989*** (0.097)	2.648*** (0.102)	2.429*** (0.223)	2.942*** (0.324)	2.884*** (0.368)
Observations	479	479	451	414	386
R-squared	0.130	0.278	0.270	0.361	0.341
Number of individuals	173	173	164	141	132

Notes Models estimated using OLS, robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; left home aged 19-20, has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, parents did not complete high school, 2005.

Male hourly wage rate

Table A.10: Male hourly wage rate continuous home leaving age

VARIABLES	(1)	(2)	(3)	(4)	(5)
Age Left Home	0.049*** (0.012)	0.015 (0.011)	0.011 (0.011)	0.013 (0.012)	0.009 (0.012)
Work Experience	-0.004 (0.010)	0.026** (0.010)	0.030*** (0.010)	0.030*** (0.011)	0.034*** (0.011)
Married		0.032 (0.045)	0.020 (0.045)	0.035 (0.049)	0.011 (0.049)
Education Level					
Completed High School		0.099 (0.079)	0.106 (0.085)	0.172** (0.084)	0.199** (0.090)
Post school Certificate		0.160** (0.076)	0.148* (0.080)	0.166* (0.086)	0.177* (0.095)
Tertiary Qualification		0.478*** (0.074)	0.475*** (0.079)	0.484*** (0.087)	0.512*** (0.097)
Major Statistical Region					
Balance NSW & ACT		0.094 (0.081)	0.090 (0.086)	0.069 (0.091)	0.061 (0.097)
Melbourne		0.043 (0.074)	0.035 (0.072)	0.077 (0.083)	0.079 (0.081)
Balance VIC & TAS		0.015 (0.124)	0.034 (0.124)	-0.023 (0.124)	-0.009 (0.130)
Brisbane		-0.066 (0.075)	-0.124* (0.075)	0.029 (0.085)	-0.042 (0.084)
Balance QLD & NT		0.081 (0.103)	0.085 (0.102)	0.052 (0.115)	0.040 (0.123)
South Australia		0.036 (0.080)	0.013 (0.084)	0.012 (0.086)	-0.010 (0.099)
Western Australia		0.188* (0.107)	0.156 (0.109)	0.168 (0.116)	0.125 (0.117)
Remoteness Area					
Inner Regional		-0.047 (0.069)	-0.075 (0.069)	0.022 (0.090)	0.009 (0.099)
Outer Regional & Remote		-0.040 (0.104)	-0.047 (0.102)	0.015 (0.115)	0.024 (0.121)
Country of Birth					
Other English Speaking		0.021 (0.146)	0.007 (0.142)	0.049 (0.171)	0.032 (0.168)
Non-English Speaking		0.114 (0.165)	0.108 (0.157)	0.140 (0.181)	0.139 (0.176)
Personality					
Extroversion			-0.001 (0.024)		0.018 (0.026)
Agreeableness			-0.062** (0.030)		-0.051 (0.031)
Conscientiousness			0.007 (0.025)		0.002 (0.028)

Neuroticism			-0.007 (0.026)		-0.006 (0.030)
Openness			0.015 (0.027)		0.015 (0.028)
Background Characteristics					
Relationship with Parents				0.007 (0.019)	0.015 (0.019)
Log relative HH income				0.116** (0.045)	0.116** (0.047)
Lived with both parents				0.041 (0.076)	0.069 (0.080)
Parents Highest Education					
Completed High School				-0.039 (0.088)	-0.041 (0.087)
Post school Certificate				-0.061 (0.070)	-0.062 (0.073)
Tertiary Qualification				0.008 (0.079)	-0.006 (0.083)
Year					
2006	-0.061 (0.089)	-0.063 (0.084)	-0.075 (0.088)	-0.047 (0.095)	-0.042 (0.100)
2007	-0.092 (0.086)	-0.166* (0.085)	-0.189** (0.088)	-0.155 (0.097)	-0.169* (0.099)
2008	-0.004 (0.086)	-0.069 (0.085)	-0.088 (0.086)	-0.045 (0.097)	-0.050 (0.099)
2009	0.069 (0.088)	-0.018 (0.085)	-0.033 (0.086)	0.005 (0.100)	0.005 (0.100)
2010	0.111 (0.092)	0.020 (0.092)	0.013 (0.092)	0.060 (0.108)	0.064 (0.109)
2011	0.115 (0.094)	0.021 (0.094)	-0.006 (0.094)	0.061 (0.108)	0.045 (0.110)
Constant	2.121*** (0.257)	2.431*** (0.262)	2.768*** (0.337)	1.075** (0.441)	1.189** (0.560)
Observations	607	605	574	526	500
R-squared	0.098	0.276	0.299	0.328	0.354
Number of individuals	205	204	190	171	159

Notes: Models estimated using OLS, robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, parents did not complete high school, 2005.

Table A.11: Male hourly wage rate dummy home leaving age

VARIABLES	(1)	(2)	(3)	(4)	(5)
Left home older than 20	0.176*** (0.061)	0.087 (0.058)	0.084 (0.062)	0.076 (0.065)	0.066 (0.070)
Work Experience	0.013 (0.010)	0.029*** (0.009)	0.032*** (0.008)	0.033*** (0.010)	0.036*** (0.010)
Married		0.032 (0.045)	0.019 (0.046)	0.038 (0.048)	0.014 (0.049)
Education Level					
Completed High School		0.098 (0.078)	0.106 (0.084)	0.173** (0.083)	0.201** (0.089)
Post school Certificate		0.160** (0.074)	0.149* (0.078)	0.171** (0.084)	0.181* (0.093)
Tertiary Qualification		0.491*** (0.075)	0.485*** (0.080)	0.501*** (0.088)	0.525*** (0.096)
Major Statistical Region					
Balance NSW & ACT		0.090 (0.082)	0.086 (0.086)	0.065 (0.092)	0.059 (0.099)
Melbourne		0.046 (0.075)	0.037 (0.072)	0.079 (0.083)	0.080 (0.081)
Balance VIC & TAS		0.026 (0.123)	0.044 (0.122)	-0.007 (0.126)	0.005 (0.130)
Brisbane		-0.080 (0.076)	-0.137* (0.076)	0.015 (0.085)	-0.050 (0.086)
Balance QLD & NT		0.075 (0.103)	0.078 (0.102)	0.049 (0.116)	0.038 (0.123)
South Australia		0.030 (0.082)	0.007 (0.084)	0.005 (0.088)	-0.014 (0.101)
Western Australia		0.178* (0.107)	0.147 (0.109)	0.157 (0.116)	0.118 (0.117)
Remoteness Area					
Inner Regional		-0.048 (0.070)	-0.074 (0.070)	0.020 (0.092)	0.007 (0.100)
Outer Regional & Remote		-0.047 (0.103)	-0.052 (0.099)	0.007 (0.115)	0.018 (0.120)
Country of Birth					
Other English Speaking		-0.009 (0.148)	-0.016 (0.144)	0.027 (0.174)	0.018 (0.172)
Non-English Speaking		0.112 (0.160)	0.102 (0.153)	0.139 (0.178)	0.135 (0.174)
Personality					
Extroversion			-0.001 (0.024)		0.018 (0.026)
Agreeableness			-0.061** (0.030)		-0.050 (0.031)
Conscientiousness			0.008 (0.024)		0.003 (0.028)

Neuroticism				-0.001 (0.026)	-0.002 (0.031)
Openness				0.013 (0.027)	0.014 (0.028)
Background Characteristics					
Relationship with Parents				0.005 (0.019)	0.013 (0.019)
Log relative HH income				0.120*** (0.044)	0.118** (0.047)
Lived with both parents				0.033 (0.078)	0.062 (0.080)
Parents Highest Education					
Completed High School				-0.046 (0.088)	-0.049 (0.087)
Post school Certificate				-0.055 (0.070)	-0.060 (0.074)
Tertiary Qualification				0.009 (0.078)	-0.008 (0.083)
Year					
2006	-0.064 (0.090)	-0.066 (0.085)	-0.079 (0.088)	-0.049 (0.096)	-0.045 (0.100)
2007	-0.106 (0.091)	-0.172** (0.087)	-0.194** (0.089)	-0.160 (0.098)	-0.173* (0.100)
2008	-0.023 (0.089)	-0.071 (0.086)	-0.089 (0.087)	-0.047 (0.099)	-0.051 (0.100)
2009	0.036 (0.090)	-0.020 (0.086)	-0.035 (0.085)	0.003 (0.101)	0.003 (0.101)
2010	0.067 (0.096)	0.017 (0.092)	0.012 (0.092)	0.058 (0.109)	0.063 (0.110)
2011	0.050 (0.098)	0.015 (0.093)	-0.008 (0.093)	0.058 (0.111)	0.045 (0.111)
Constant	2.991*** (0.103)	2.668*** (0.131)	2.917*** (0.242)	1.265*** (0.433)	1.312** (0.542)
Observations	607	605	574	526	500
R-squared	0.061	0.277	0.301	0.329	0.355
Number of individuals	205	204	190	171	159

Notes: Models estimated using OLS, robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, parents did not complete high school, 2005.

Table A.12: Male hourly wage rate four categories of home leaving age

VARIABLES	(1)	(2)	(3)	(4)	(5)
Age Left Home					
15-18	-0.134 (0.087)	-0.054 (0.092)	-0.123 (0.101)	-0.011 (0.097)	-0.080 (0.106)
21-22	0.063 (0.067)	0.039 (0.066)	0.035 (0.073)	0.044 (0.072)	0.037 (0.077)
23-28	0.210*** (0.074)	0.105 (0.070)	0.072 (0.076)	0.104 (0.078)	0.059 (0.086)
Work Experience	0.007 (0.010)	0.026*** (0.009)	0.030*** (0.009)	0.030*** (0.010)	0.034*** (0.011)
Married		0.032 (0.044)	0.016 (0.045)	0.037 (0.048)	0.010 (0.049)
Education Level					
Completed High School		0.102 (0.078)	0.107 (0.085)	0.174** (0.083)	0.203** (0.089)
Post school Certificate		0.161** (0.075)	0.144* (0.081)	0.169** (0.085)	0.178* (0.094)
Tertiary Qualification		0.482*** (0.075)	0.475*** (0.082)	0.490*** (0.089)	0.519*** (0.098)
Major Statistical Region					
Balance NSW & ACT		0.096 (0.086)	0.081 (0.091)	0.077 (0.097)	0.057 (0.103)
Melbourne		0.047 (0.076)	0.029 (0.073)	0.085 (0.084)	0.074 (0.082)
Balance VIC & TAS		0.016 (0.124)	0.023 (0.124)	-0.012 (0.128)	-0.008 (0.133)
Brisbane		-0.071 (0.077)	-0.136* (0.080)	0.025 (0.086)	-0.052 (0.091)
Balance QLD & NT		0.081 (0.107)	0.072 (0.105)	0.060 (0.120)	0.034 (0.126)
South Australia		0.039 (0.085)	0.001 (0.088)	0.019 (0.093)	-0.020 (0.105)
Western Australia		0.186* (0.108)	0.144 (0.112)	0.167 (0.117)	0.117 (0.119)
Remoteness Area					
Inner Regional		-0.047 (0.069)	-0.071 (0.068)	0.015 (0.093)	0.005 (0.100)
Outer Regional & Remote		-0.040 (0.103)	-0.052 (0.101)	0.012 (0.118)	0.015 (0.123)
Country of Birth					
Other English Speaking		0.029 (0.155)	0.013 (0.149)	0.053 (0.181)	0.031 (0.178)
Non-English Speaking		0.104 (0.029)	0.096 (0.013)	0.135 (0.053)	0.130 (0.031)
Personality					
Extroversion			-0.002 (0.024)		0.018 (0.026)

Agreeableness			-0.061**		-0.051
			(0.031)		(0.032)
Conscientiousness			0.009		0.003
			(0.025)		(0.028)
Neuroticism			-0.005		-0.004
			(0.027)		(0.031)
Openness			0.013		0.015
			(0.027)		(0.028)
Background Characteristics					
Relationship with Parents				0.005	0.013
				(0.019)	(0.020)
Log relative HH income				0.115***	0.111**
				(0.043)	(0.046)
Lived with both parents				0.045	0.069
				(0.078)	(0.080)
Parents Highest Education					
Completed High School				-0.052	-0.058
				(0.089)	(0.090)
Post school Certificate				-0.064	-0.067
				(0.070)	(0.075)
Tertiary Qualification				-0.003	-0.018
				(0.080)	(0.085)
Year					
2006	-0.079	-0.071	-0.082	-0.056	-0.048
	(0.089)	(0.084)	(0.087)	(0.095)	(0.099)
2007	-0.107	-0.171*	-0.194**	-0.160	-0.174*
	(0.091)	(0.087)	(0.089)	(0.098)	(0.100)
2008	-0.025	-0.070	-0.090	-0.046	-0.052
	(0.090)	(0.087)	(0.088)	(0.100)	(0.101)
2009	0.039	-0.017	-0.032	0.003	0.005
	(0.091)	(0.087)	(0.087)	(0.102)	(0.102)
2010	0.071	0.020	0.015	0.061	0.066
	(0.097)	(0.093)	(0.094)	(0.111)	(0.112)
2011	0.065	0.023	0.000	0.064	0.052
	(0.099)	(0.095)	(0.096)	(0.113)	(0.114)
Constant	2.836***	2.594***	2.759***	1.104**	1.193**
	(0.085)	(0.138)	(0.246)	(0.474)	(0.579)
Observations	607	605	574	526	500
R-squared	0.084	0.281	0.305	0.331	0.357
Number of individuals	205	204	190	171	159

Notes: Models estimated using OLS, robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; left home aged 19-20, has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, parents did not complete high school, 2005.

Female employment robustness tests

Table A.13: Robustness test of female employment with continuous home leaving age

VARIABLES	(1)	(2)	(3)	(4)	(5)
Age Left Home	0.009*** (0.004)	0.004 (0.004)	0.005 (0.004)	0.002 (0.005)	0.001 (0.005)
Age	-0.004* (0.002)	-0.002 (0.002)	-0.003 (0.002)	-0.002 (0.003)	-0.001 (0.003)
Married		-0.045** (0.020)	-0.067*** (0.021)	-0.048* (0.026)	-0.069** (0.028)
Education Level					
Completed High School		0.120*** (0.032)	0.126*** (0.033)	0.136*** (0.040)	0.156*** (0.042)
Post school Certificate		0.160*** (0.028)	0.163*** (0.030)	0.194*** (0.036)	0.216*** (0.038)
Tertiary Qualification		0.237*** (0.028)	0.242*** (0.030)	0.252*** (0.035)	0.278*** (0.038)
Major Statistical Region					
Balance NSW & ACT		0.040 (0.036)	0.029 (0.038)	0.082* (0.044)	0.071 (0.048)
Melbourne		0.069** (0.030)	0.065** (0.033)	0.092** (0.037)	0.082** (0.040)
Balance VIC & TAS		0.079* (0.045)	0.075 (0.048)	0.097* (0.053)	0.095* (0.056)
Brisbane		0.086** (0.035)	0.080** (0.037)	0.100** (0.041)	0.099** (0.045)
Balance QLD & NT		0.049 (0.040)	0.033 (0.043)	0.061 (0.049)	0.053 (0.052)
South Australia		0.042 (0.041)	0.039 (0.044)	0.039 (0.052)	0.031 (0.056)
Western Australia		-0.001 (0.040)	-0.010 (0.043)	0.009 (0.051)	-0.002 (0.054)
Remoteness Area					
Inner Regional		-0.026 (0.029)	-0.032 (0.030)	-0.007 (0.036)	-0.019 (0.038)
Outer Regional & Remote		-0.020 (0.035)	-0.014 (0.037)	0.020 (0.042)	0.024 (0.044)
Country of Birth					
Other English Speaking		0.026 (0.047)	0.016 (0.049)	-0.047 (0.067)	-0.075 (0.069)
Non-English Speaking		-0.049 (0.036)	-0.038 (0.038)	-0.056 (0.043)	-0.061 (0.045)
Personality					
Extroversion			0.009 (0.009)		0.010 (0.012)
Agreeableness			-0.003 (0.014)		0.029* (0.017)
Conscientiousness			0.024** (0.010)		0.010 (0.014)

Neuroticism			-0.015 (0.011)		-0.026** (0.013)
Openness			-0.027** (0.011)		-0.042*** (0.013)
Background Characteristics					
Lived with both parents				0.009 (0.032)	-0.006 (0.034)
Father employed historic				0.122* (0.062)	0.131** (0.066)
Mother employed historic				0.022 (0.026)	0.023 (0.027)
Year					
2006	0.028* (0.017)	0.022 (0.018)	0.031* (0.018)	0.020 (0.021)	0.021 (0.021)
2007	0.030 (0.019)	0.021 (0.019)	0.024 (0.020)	0.010 (0.023)	0.006 (0.024)
2008	0.003 (0.020)	-0.009 (0.021)	0.001 (0.022)	-0.001 (0.026)	0.007 (0.027)
2009	0.022 (0.021)	0.006 (0.021)	0.015 (0.022)	0.020 (0.027)	0.021 (0.028)
2010	0.042** (0.021)	0.024 (0.022)	0.030 (0.023)	0.004 (0.029)	-0.001 (0.031)
2011	0.035 (0.022)	0.016 (0.023)	0.032 (0.023)	0.008 (0.031)	0.016 (0.032)
Observations	6,525	6,525	5,979	4,237	3,861
Pseudo R-squared	0.00345	0.0312	0.0345	0.0379	0.0434

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, 2005. Models estimated using probit regression and marginal effects presented.

Table A.14: Robustness test of female employment with dummy home leaving age

VARIABLES	(1)	(2)	(3)	(4)	(5)
Left home older than 20	0.052** (0.020)	0.023 (0.021)	0.022 (0.022)	0.014 (0.026)	0.007 (0.028)
Age	-0.004* (0.002)	-0.002 (0.002)	-0.003 (0.002)	-0.002 (0.003)	-0.001 (0.003)
Married		-0.045** (0.020)	-0.067*** (0.021)	-0.049* (0.026)	-0.069** (0.028)
Education Level					
Completed High School		0.120*** (0.032)	0.127*** (0.033)	0.135*** (0.040)	0.156*** (0.042)
Post school Certificate		0.160*** (0.028)	0.164*** (0.030)	0.193*** (0.036)	0.215*** (0.038)
Tertiary Qualification		0.237*** (0.028)	0.244*** (0.030)	0.251*** (0.036)	0.278*** (0.039)
Major Statistical Region					
Balance NSW & ACT		0.039 (0.035)	0.028 (0.038)	0.082* (0.044)	0.071 (0.048)
Melbourne		0.069** (0.030)	0.064* (0.033)	0.091** (0.037)	0.082** (0.040)
Balance VIC & TAS		0.078* (0.046)	0.073 (0.049)	0.096* (0.053)	0.094* (0.057)
Brisbane		0.085** (0.035)	0.079** (0.037)	0.100** (0.041)	0.099** (0.045)
Balance QLD & NT		0.048 (0.040)	0.031 (0.043)	0.061 (0.049)	0.053 (0.052)
South Australia		0.041 (0.041)	0.037 (0.044)	0.038 (0.052)	0.030 (0.056)
Western Australia		-0.002 (0.040)	-0.012 (0.043)	0.009 (0.051)	-0.002 (0.053)
Remoteness Area					
Inner Regional		-0.026 (0.029)	-0.033 (0.030)	-0.007 (0.036)	-0.019 (0.038)
Outer Regional & Remote		-0.020 (0.035)	-0.014 (0.037)	0.021 (0.042)	0.024 (0.044)
Country of Birth					
Other English Speaking		0.026 (0.047)	0.017 (0.049)	-0.047 (0.067)	-0.074 (0.069)
Non-English Speaking		-0.047 (0.036)	-0.036 (0.038)	-0.055 (0.043)	-0.061 (0.045)
Personality					
Extroversion			0.009 (0.009)		0.010 (0.012)
Agreeableness			-0.003 (0.014)		0.029* (0.017)
Conscientiousness			0.023** (0.010)		0.010 (0.014)

Neuroticism			-0.014 (0.011)		-0.026** (0.013)
Openness			-0.027** (0.011)		-0.042*** (0.013)
Background Characteristics					
Lived with both parents				0.009 (0.032)	-0.006 (0.034)
Father employed historic				0.121* (0.062)	0.130** (0.066)
Mother employed historic				0.021 (0.026)	0.023 (0.027)
Year					
2006	0.028* (0.017)	0.022 (0.018)	0.031* (0.018)	0.020 (0.021)	0.021 (0.021)
2007	0.030 (0.019)	0.021 (0.019)	0.025 (0.020)	0.010 (0.023)	0.006 (0.024)
2008	0.004 (0.020)	-0.009 (0.021)	0.002 (0.022)	-0.000 (0.026)	0.007 (0.027)
2009	0.022 (0.021)	0.006 (0.021)	0.015 (0.022)	0.020 (0.027)	0.022 (0.028)
2010	0.043** (0.021)	0.024 (0.022)	0.030 (0.023)	0.005 (0.029)	-0.001 (0.030)
2011	0.036 (0.022)	0.016 (0.023)	0.033 (0.023)	0.009 (0.031)	0.016 (0.032)
Observations	6,525	6,525	5,979	4,237	3,861
Pseudo R-squared	0.00325	0.0312	0.0343	0.0380	0.0435

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, 2005. Models estimated using probit regression and marginal effects presented.

Table A.15: Robustness tests of female employment with four categories of home leaving age

VARIABLES	(1)	(2)	(3)	(4)	(5)
Age Left Home					
15-18	-0.039 (0.026)	-0.039 (0.026)	-0.043 (0.027)	-0.002 (0.033)	-0.004 (0.035)
21-22	0.005 (0.032)	-0.022 (0.032)	-0.028 (0.033)	-0.020 (0.039)	-0.030 (0.042)
23-28	0.045 (0.033)	0.017 (0.034)	0.016 (0.036)	0.057 (0.042)	0.053 (0.045)
Age	-0.004* (0.002)	-0.002 (0.002)	-0.003 (0.002)	-0.003 (0.003)	-0.002 (0.003)
Married		-0.045** (0.020)	-0.067*** (0.021)	-0.048* (0.026)	-0.068** (0.028)
Education Level					
Completed High School		0.122*** (0.031)	0.129*** (0.033)	0.137*** (0.040)	0.157*** (0.041)
Post school Certificate		0.160*** (0.028)	0.164*** (0.030)	0.195*** (0.036)	0.217*** (0.038)
Tertiary Qualification		0.237*** (0.028)	0.243*** (0.030)	0.252*** (0.036)	0.279*** (0.038)
Major Statistical Region					
Balance NSW & ACT		0.041 (0.035)	0.030 (0.038)	0.082* (0.044)	0.068 (0.047)
Melbourne		0.070** (0.030)	0.066** (0.033)	0.095** (0.037)	0.085** (0.040)
Balance VIC & TAS		0.081* (0.045)	0.076 (0.048)	0.103* (0.053)	0.099* (0.056)
Brisbane		0.088** (0.035)	0.082** (0.037)	0.102** (0.041)	0.100** (0.045)
Balance QLD & NT		0.051 (0.040)	0.035 (0.043)	0.066 (0.049)	0.058 (0.053)
South Australia		0.042 (0.041)	0.039 (0.044)	0.041 (0.052)	0.031 (0.056)
Western Australia		0.002 (0.040)	-0.009 (0.043)	0.014 (0.050)	0.001 (0.053)
Remoteness Area					
Inner Regional		-0.025 (0.029)	-0.031 (0.030)	-0.007 (0.036)	-0.019 (0.038)
Outer Regional & Remote		-0.019 (0.035)	-0.014 (0.037)	0.018 (0.042)	0.021 (0.045)
Country of Birth					
Other English Speaking		0.022 (0.048)	0.012 (0.049)	-0.053 (0.067)	-0.081 (0.069)
Non-English Speaking		-0.053 (0.036)	-0.043 (0.038)	-0.059 (0.043)	-0.067 (0.045)

Personality					
Extroversion			0.009 (0.009)		0.009 (0.012)
Agreeableness			-0.004 (0.014)		0.027 (0.017)
Conscientiousness			0.023** (0.010)		0.008 (0.014)
Neuroticism			-0.015 (0.011)		-0.026** (0.013)
Openness			-0.026** (0.011)		-0.041*** (0.013)
Background Characteristics					
Lived with both parents				0.012 (0.032)	-0.003 (0.034)
Father employed historic				0.121* (0.063)	0.131** (0.067)
Mother employed historic				0.021 (0.026)	0.022 (0.027)
Year					
2006	0.028* (0.017)	0.022 (0.018)	0.030* (0.018)	0.020 (0.021)	0.021 (0.021)
2007	0.030 (0.019)	0.021 (0.019)	0.024 (0.020)	0.011 (0.023)	0.006 (0.025)
2008	0.003 (0.020)	-0.010 (0.021)	0.000 (0.022)	-0.000 (0.026)	0.007 (0.027)
2009	0.021 (0.021)	0.005 (0.021)	0.014 (0.022)	0.021 (0.027)	0.023 (0.028)
2010	0.042* (0.021)	0.023 (0.022)	0.028 (0.023)	0.005 (0.029)	-0.000 (0.031)
2011	0.034 (0.022)	0.015 (0.023)	0.030 (0.023)	0.010 (0.031)	0.017 (0.032)
Observations	6,525	6,525	5,979	4,237	3,861
Pseudo R-squared	0.00433	0.0322	0.0355	0.0394	0.0451

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; left home aged 19-20, has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, 2005. Models estimated using probit regression and marginal effects presented.

Male employment robustness tests

Table A.16: Robustness test of male employment with continuous home leaving age

VARIABLES	(1)	(2)	(3)	(4)	(5)
Age Left Home	0.009*** (0.003)	0.006** (0.003)	0.005* (0.003)	0.005 (0.004)	0.004 (0.004)
Age	-0.001 (0.002)	-0.005** (0.002)	-0.005** (0.002)	-0.004 (0.003)	-0.005 (0.003)
Married		0.109*** (0.019)	0.087*** (0.020)	0.083*** (0.025)	0.059** (0.025)
Education Level					
Completed High School		0.089*** (0.026)	0.097*** (0.027)	0.085** (0.033)	0.093*** (0.035)
Post school Certificate		0.115*** (0.025)	0.113*** (0.027)	0.108*** (0.032)	0.112*** (0.035)
Tertiary Qualification		0.152*** (0.023)	0.154*** (0.025)	0.145*** (0.030)	0.146*** (0.032)
Major Statistical Region					
Balance NSW & ACT		-0.003 (0.033)	-0.006 (0.035)	-0.005 (0.040)	-0.010 (0.042)
Melbourne		0.019 (0.027)	0.017 (0.028)	-0.012 (0.033)	-0.022 (0.035)
Balance VIC & TAS		-0.056 (0.044)	-0.064 (0.049)	-0.069 (0.054)	-0.092 (0.061)
Brisbane		0.016 (0.032)	0.005 (0.034)	-0.024 (0.043)	-0.040 (0.046)
Balance QLD & NT		-0.071* (0.039)	-0.071* (0.042)	-0.085* (0.048)	-0.089* (0.052)
South Australia		-0.039 (0.040)	-0.021 (0.042)	-0.072 (0.051)	-0.063 (0.052)
Western Australia		0.041 (0.031)	0.048 (0.030)	0.018 (0.039)	0.019 (0.040)
Remoteness Area					
Inner Regional		-0.003 (0.026)	-0.015 (0.029)	-0.018 (0.033)	-0.024 (0.035)
Outer Regional & Remote		-0.006 (0.032)	-0.022 (0.036)	-0.025 (0.040)	-0.039 (0.044)
Country of Birth					
Other English Speaking		-0.035 (0.035)	-0.018 (0.035)	-0.041 (0.044)	-0.029 (0.044)
Non-English Speaking		-0.099*** (0.036)	-0.075** (0.035)	-0.104** (0.042)	-0.075* (0.040)
Personality					
Extroversion			-0.011 (0.010)		-0.027** (0.012)
Agreeableness			0.000 (0.011)		-0.004 (0.013)
Conscientiousness			0.008 (0.010)		0.001 (0.014)

Neuroticism			0.016 (0.010)		0.023* (0.012)
Openness			-0.024** (0.010)		-0.009 (0.013)
Background Characteristics					
Lived with both parents				0.035 (0.028)	0.020 (0.029)
Father employed historic				0.089 (0.058)	0.098 (0.061)
Mother employed historic				0.021 (0.022)	0.019 (0.023)
Year					
2006	-0.053*** (0.019)	-0.048** (0.019)	-0.046** (0.020)	-0.040* (0.022)	-0.046** (0.023)
2007	-0.015 (0.019)	-0.010 (0.020)	-0.008 (0.020)	0.001 (0.023)	-0.001 (0.024)
2008	-0.025 (0.021)	-0.020 (0.021)	-0.018 (0.022)	-0.024 (0.026)	-0.023 (0.027)
2009	-0.024 (0.022)	-0.018 (0.022)	-0.025 (0.023)	-0.028 (0.028)	-0.037 (0.030)
2010	-0.018 (0.022)	-0.014 (0.023)	-0.012 (0.023)	-0.011 (0.028)	-0.009 (0.029)
2011	-0.031 (0.023)	-0.029 (0.023)	-0.026 (0.024)	-0.041 (0.032)	-0.040 (0.033)
Observations	5,248	5,245	4,737	3,527	3,218
Pseudo R-squared	0.00517	0.0420	0.0444	0.0397	0.0438

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, 2005. Models estimated using probit regression and marginal effects presented.

Table A.17: Robustness test of male employment with dummy home leaving age

VARIABLES	(1)	(2)	(3)	(4)	(5)
Left home older than 20	0.043** (0.018)	0.023 (0.018)	0.028 (0.018)	0.015 (0.022)	0.020 (0.022)
Age	-0.001 (0.002)	-0.005** (0.002)	-0.005** (0.002)	-0.004 (0.003)	-0.005 (0.003)
Married		0.109*** (0.020)	0.087*** (0.020)	0.083*** (0.025)	0.059** (0.025)
Education Level					
Completed High School		0.092*** (0.025)	0.100*** (0.027)	0.088*** (0.033)	0.094*** (0.035)
Post school Certificate		0.118*** (0.025)	0.114*** (0.027)	0.110*** (0.032)	0.113*** (0.035)
Tertiary Qualification		0.154*** (0.023)	0.156*** (0.025)	0.145*** (0.030)	0.146*** (0.032)
Major Statistical Region					
Balance NSW & ACT		-0.006 (0.034)	-0.009 (0.035)	-0.007 (0.040)	-0.011 (0.042)
Melbourne		0.018 (0.027)	0.016 (0.028)	-0.013 (0.033)	-0.023 (0.035)
Balance VIC & TAS		-0.060 (0.044)	-0.066 (0.049)	-0.073 (0.054)	-0.093 (0.061)
Brisbane		0.011 (0.032)	0.001 (0.034)	-0.029 (0.044)	-0.042 (0.046)
Balance QLD & NT		-0.075* (0.039)	-0.074* (0.042)	-0.089* (0.048)	-0.090* (0.052)
South Australia		-0.041 (0.040)	-0.023 (0.042)	-0.074 (0.052)	-0.063 (0.052)
Western Australia		0.038 (0.031)	0.046 (0.031)	0.015 (0.039)	0.018 (0.040)
Remoteness Area					
Inner Regional		-0.004 (0.026)	-0.016 (0.029)	-0.020 (0.033)	-0.025 (0.035)
Outer Regional & Remote		-0.008 (0.032)	-0.024 (0.036)	-0.027 (0.040)	-0.040 (0.044)
Country of Birth					
Other English Speaking		-0.038 (0.035)	-0.020 (0.035)	-0.042 (0.045)	-0.029 (0.044)
Non-English Speaking		-0.097*** (0.036)	-0.073** (0.035)	-0.101** (0.042)	-0.072* (0.039)
Personality					
Extroversion			-0.011 (0.010)		-0.027** (0.012)
Agreeableness			0.001 (0.011)		-0.004 (0.013)
Conscientiousness			0.008 (0.010)		0.001 (0.014)

Neuroticism			0.017*		0.023*
			(0.010)		(0.012)
Openness			-0.024**		-0.010
			(0.010)		(0.013)
Background Characteristics					
Lived with both parents				0.035	0.020
				(0.028)	(0.029)
Father employed historic				0.088	0.099
				(0.058)	(0.061)
Mother employed historic				0.021	0.018
				(0.022)	(0.023)
Year					
2006	-0.053***	-0.048**	-0.046**	-0.040*	-0.046**
	(0.019)	(0.019)	(0.020)	(0.022)	(0.023)
2007	-0.014	-0.010	-0.007	0.000	-0.001
	(0.019)	(0.020)	(0.020)	(0.023)	(0.024)
2008	-0.024	-0.020	-0.018	-0.024	-0.023
	(0.021)	(0.021)	(0.022)	(0.026)	(0.027)
2009	-0.023	-0.018	-0.025	-0.028	-0.037
	(0.022)	(0.022)	(0.023)	(0.028)	(0.030)
2010	-0.017	-0.013	-0.011	-0.012	-0.009
	(0.022)	(0.022)	(0.023)	(0.028)	(0.029)
2011	-0.030	-0.028	-0.025	-0.041	-0.040
	(0.023)	(0.023)	(0.024)	(0.032)	(0.033)
Observations	5,248	5,245	4,737	3,527	3,218
Pseudo R-squared	0.00344	0.0412	0.0441	0.0391	0.0438

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, 2005. Models estimated using probit regression and marginal effects presented.

Table A. 18: Robustness tests of male employment with four categories of home leaving age

VARIABLES	(1)	(2)	(3)	(4)	(5)
Age Left Home					
15-18	0.015 (0.025)	0.008 (0.025)	0.017 (0.025)	0.012 (0.030)	0.027 (0.031)
21-22	0.014 (0.029)	-0.002 (0.029)	0.016 (0.029)	-0.005 (0.035)	0.023 (0.034)
23-28	0.078*** (0.025)	0.051** (0.026)	0.055** (0.026)	0.046 (0.032)	0.047 (0.032)
Age	-0.002 (0.002)	-0.005** (0.002)	-0.005** (0.002)	-0.004 (0.003)	-0.005* (0.003)
Married		0.107*** (0.020)	0.086*** (0.020)	0.081*** (0.025)	0.057** (0.025)
Education Level					
Completed High School		0.093*** (0.025)	0.101*** (0.027)	0.090*** (0.033)	0.098*** (0.034)
Post school Certificate		0.117*** (0.025)	0.114*** (0.027)	0.111*** (0.032)	0.114*** (0.035)
Tertiary Qualification		0.153*** (0.023)	0.154*** (0.025)	0.146*** (0.029)	0.145*** (0.032)
Major Statistical Region					
Balance NSW & ACT		0.005 (0.033)	0.001 (0.035)	0.004 (0.040)	-0.003 (0.043)
Melbourne		0.023 (0.027)	0.020 (0.028)	-0.008 (0.034)	-0.021 (0.036)
Balance VIC & TAS		-0.052 (0.044)	-0.060 (0.049)	-0.063 (0.054)	-0.087 (0.062)
Brisbane		0.019 (0.032)	0.008 (0.034)	-0.019 (0.044)	-0.037 (0.047)
Balance QLD & NT		-0.066* (0.039)	-0.067 (0.042)	-0.079 (0.049)	-0.084 (0.052)
South Australia		-0.034 (0.039)	-0.016 (0.041)	-0.068 (0.051)	-0.058 (0.052)
Western Australia		0.042 (0.031)	0.049 (0.030)	0.019 (0.039)	0.020 (0.040)
Remoteness Area					
Inner Regional		-0.006 (0.026)	-0.017 (0.029)	-0.021 (0.033)	-0.026 (0.035)
Outer Regional & Remote		-0.011 (0.033)	-0.026 (0.036)	-0.030 (0.041)	-0.043 (0.044)
Country of Birth					
Other English Speaking		-0.035 (0.035)	-0.018 (0.035)	-0.037 (0.044)	-0.025 (0.044)
Non-English Speaking		-0.097*** (0.035)	-0.073** (0.035)	-0.100** (0.042)	-0.069* (0.039)
Personality					
Extroversion			-0.010 (0.010)		-0.027** (0.012)

Agreeableness			0.000 (0.011)		-0.005 (0.013)
Conscientiousness			0.009 (0.010)		0.002 (0.014)
Neuroticism			0.017* (0.010)		0.024* (0.012)
Openness			-0.024** (0.010)		-0.008 (0.013)
Background Characteristics					
Lived with both parents				0.034 (0.028)	0.018 (0.028)
Father employed historic				0.094 (0.058)	0.104* (0.062)
Mother employed historic				0.022 (0.022)	0.019 (0.023)
Year					
2006	-0.053*** (0.019)	-0.048** (0.019)	-0.046** (0.020)	-0.040* (0.022)	-0.046** (0.023)
2007	-0.013 (0.019)	-0.009 (0.020)	-0.007 (0.020)	0.001 (0.023)	-0.000 (0.024)
2008	-0.023 (0.021)	-0.019 (0.021)	-0.017 (0.022)	-0.023 (0.026)	-0.022 (0.027)
2009	-0.022 (0.022)	-0.017 (0.022)	-0.024 (0.023)	-0.027 (0.028)	-0.036 (0.030)
2010	-0.016 (0.022)	-0.013 (0.023)	-0.011 (0.023)	-0.010 (0.028)	-0.007 (0.029)
2011	-0.029 (0.023)	-0.028 (0.023)	-0.025 (0.024)	-0.040 (0.032)	-0.039 (0.033)
Observations	5,248	5,245	4,737	3,527	3,218
Pseudo R-squared	0.00576	0.0426	0.0451	0.0403	0.0446

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; left home aged 19-20, has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, 2005. Models estimated using probit regression and marginal effects presented.

Female hourly wage rate robustness tests

Table A.19: Robustness tests of female hourly wage with continuous home leaving age

VARIABLES	(1)	(2)	(3)	(4)	(5)
Age Left Home	0.016*** (0.005)	-0.002 (0.004)	-0.002 (0.004)	0.000 (0.006)	0.001 (0.006)
Work Experience	0.013*** (0.003)	0.018*** (0.002)	0.016*** (0.002)	0.017*** (0.003)	0.015*** (0.003)
Married		0.054*** (0.021)	0.052** (0.021)	0.014 (0.027)	-0.005 (0.028)
Education Level					
Completed High School		0.139*** (0.034)	0.135*** (0.035)	0.182*** (0.041)	0.171*** (0.042)
Post school Certificate		0.161*** (0.032)	0.162*** (0.034)	0.175*** (0.037)	0.174*** (0.040)
Tertiary Qualification		0.451*** (0.031)	0.439*** (0.033)	0.482*** (0.036)	0.465*** (0.039)
Major Statistical Region					
Balance NSW & ACT		-0.046 (0.040)	-0.022 (0.041)	-0.069 (0.049)	-0.044 (0.050)
Melbourne		-0.079** (0.040)	-0.078* (0.041)	-0.134** (0.052)	-0.127** (0.052)
Balance VIC & TAS		-0.085* (0.050)	-0.080 (0.052)	-0.163*** (0.061)	-0.162** (0.063)
Brisbane		-0.152*** (0.044)	-0.132*** (0.045)	-0.192*** (0.057)	-0.163*** (0.059)
Balance QLD & NT		-0.110** (0.044)	-0.091** (0.046)	-0.175*** (0.054)	-0.151*** (0.055)
South Australia		-0.149*** (0.040)	-0.131*** (0.042)	-0.205*** (0.049)	-0.195*** (0.051)
Western Australia		-0.001 (0.045)	0.001 (0.046)	-0.037 (0.058)	-0.028 (0.057)
Remoteness Area					
Inner Regional		-0.107*** (0.031)	-0.106*** (0.031)	-0.085** (0.039)	-0.090** (0.040)
Outer Regional & Remote		-0.050 (0.040)	-0.041 (0.042)	-0.024 (0.049)	-0.020 (0.052)
Country of Birth					
Other English Speaking		-0.044 (0.049)	-0.037 (0.049)	-0.017 (0.064)	0.000 (0.063)
Non-English Speaking		-0.016 (0.048)	0.001 (0.049)	-0.072 (0.051)	-0.052 (0.053)
Personality					
Extroversion			0.019* (0.011)		0.017 (0.013)
Agreeableness			-0.014 (0.013)		-0.038** (0.017)
Conscientiousness			0.017 (0.011)		0.020 (0.014)

Neuroticism			0.002 (0.010)		0.013 (0.012)
Openness			0.010 (0.011)		0.012 (0.015)
Background Characteristics					
Lived with both parents				-0.019 (0.033)	0.015 (0.032)
Father employed historic				0.060 (0.051)	0.026 (0.047)
Mother employed historic				0.020 (0.029)	0.024 (0.029)
Year					
2006	-0.003 (0.022)	0.005 (0.021)	0.010 (0.022)	-0.009 (0.025)	-0.010 (0.026)
2007	0.020 (0.022)	0.023 (0.021)	0.034 (0.022)	0.038 (0.024)	0.045* (0.025)
2008	0.013 (0.025)	0.012 (0.025)	0.019 (0.025)	0.019 (0.030)	0.020 (0.031)
2009	0.057** (0.025)	0.063*** (0.024)	0.073*** (0.024)	0.057** (0.029)	0.071** (0.029)
2010	0.106*** (0.030)	0.106*** (0.028)	0.109*** (0.029)	0.097*** (0.037)	0.093** (0.038)
2011	0.112*** (0.031)	0.108*** (0.030)	0.117*** (0.030)	0.091** (0.044)	0.103** (0.045)
Constant	2.675*** (0.096)	2.786*** (0.095)	2.634*** (0.135)	2.741*** (0.138)	2.663*** (0.181)
Observations	3,425	3,425	3,246	2,274	2,151
R-squared	0.035	0.192	0.189	0.195	0.193
Number of individuals	985	985	921	626	582

Notes: Models estimated using OLS, robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, 2005.

Table A.20: Robustness tests of female hourly wage with dummy home leaving age

VARIABLES	(1)	(2)	(3)	(4)	(5)
Left home older than 20	0.053** (0.027)	-0.038 (0.024)	-0.041* (0.024)	-0.029 (0.031)	-0.035 (0.031)
Work Experience	0.014*** (0.003)	0.018*** (0.002)	0.017*** (0.002)	0.018*** (0.003)	0.016*** (0.003)
Married		0.055*** (0.021)	0.053** (0.021)	0.016 (0.027)	-0.002 (0.028)
Education Level					
Completed High School		0.143*** (0.034)	0.138*** (0.035)	0.185*** (0.041)	0.174*** (0.041)
Post school Certificate		0.164*** (0.032)	0.164*** (0.034)	0.178*** (0.038)	0.179*** (0.040)
Tertiary Qualification		0.458*** (0.031)	0.445*** (0.033)	0.487*** (0.036)	0.471*** (0.039)
Major Statistical Region					
Balance NSW & ACT		-0.046 (0.039)	-0.021 (0.040)	-0.067 (0.049)	-0.039 (0.050)
Melbourne		-0.079** (0.040)	-0.078* (0.041)	-0.133** (0.052)	-0.124** (0.052)
Balance VIC & TAS		-0.084* (0.050)	-0.079 (0.052)	-0.160*** (0.061)	-0.157** (0.063)
Brisbane		-0.157*** (0.044)	-0.136*** (0.045)	-0.196*** (0.058)	-0.167*** (0.060)
Balance QLD & NT		-0.111** (0.044)	-0.091** (0.045)	-0.174*** (0.054)	-0.148*** (0.055)
South Australia		-0.149*** (0.040)	-0.130*** (0.041)	-0.201*** (0.050)	-0.188*** (0.051)
Western Australia		-0.002 (0.045)	0.001 (0.046)	-0.036 (0.058)	-0.026 (0.057)
Remoteness Area					
Inner Regional		-0.111*** (0.031)	-0.111*** (0.032)	-0.092** (0.039)	-0.099** (0.041)
Outer Regional & Remote		-0.055 (0.040)	-0.046 (0.042)	-0.033 (0.049)	-0.033 (0.051)
Country of Birth					
Other English Speaking		-0.047 (0.049)	-0.041 (0.049)	-0.017 (0.064)	0.001 (0.064)
Non-English Speaking		-0.016 (0.048)	0.002 (0.049)	-0.071 (0.051)	-0.050 (0.052)
Personality					
Extroversion			0.019* (0.011)		0.016 (0.013)
Agreeableness			-0.012 (0.013)		-0.036** (0.017)
Conscientiousness			0.018 (0.011)		0.022 (0.014)

Neuroticism			0.002 (0.010)		0.013 (0.012)
Openness			0.010 (0.011)		0.011 (0.015)
Background Characteristics					
Lived with both parents				-0.022 (0.033)	0.011 (0.032)
Father employed historic				0.061 (0.051)	0.026 (0.048)
Mother employed historic				0.019 (0.029)	0.022 (0.029)
Year					
2006	-0.003 (0.022)	0.005 (0.021)	0.010 (0.022)	-0.009 (0.025)	-0.010 (0.026)
2007	0.021 (0.022)	0.023 (0.021)	0.034 (0.022)	0.038 (0.024)	0.045* (0.025)
2008	0.013 (0.025)	0.012 (0.025)	0.019 (0.025)	0.018 (0.030)	0.020 (0.031)
2009	0.057** (0.025)	0.063*** (0.024)	0.074*** (0.024)	0.057** (0.029)	0.071** (0.029)
2010	0.108*** (0.030)	0.106*** (0.028)	0.110*** (0.029)	0.096** (0.037)	0.093** (0.038)
2011	0.114*** (0.031)	0.108*** (0.030)	0.118*** (0.030)	0.089** (0.044)	0.102** (0.045)
Constant	2.970*** (0.034)	2.762*** (0.046)	2.601*** (0.108)	2.751*** (0.079)	2.680*** (0.142)
Observations	3,425	3,425	3,246	2,274	2,151
R-squared	0.030	0.193	0.190	0.196	0.194
Number of individuals	985	985	921	626	582

Notes: Models estimated using OLS, robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, 2005.

Table A.21: Robustness tests of female hourly wage with four categories of home leaving age

VARIABLES	(1)	(2)	(3)	(4)	(5)
Age Left Home					
15-18	-0.030 (0.036)	-0.027 (0.032)	-0.021 (0.032)	-0.012 (0.042)	-0.022 (0.044)
21-22	-0.031 (0.041)	-0.096** (0.038)	-0.100*** (0.037)	-0.082* (0.049)	-0.104** (0.050)
23-28	0.100** (0.045)	-0.015 (0.039)	-0.006 (0.039)	0.020 (0.051)	0.024 (0.053)
Work Experience	0.013*** (0.003)	0.018*** (0.002)	0.016*** (0.002)	0.017*** (0.003)	0.015*** (0.003)
Married		0.053** (0.021)	0.052** (0.021)	0.013 (0.026)	-0.005 (0.028)
Education Level					
Completed High School		0.147*** (0.034)	0.144*** (0.036)	0.192*** (0.041)	0.184*** (0.042)
Post school Certificate		0.167*** (0.032)	0.169*** (0.034)	0.184*** (0.038)	0.186*** (0.040)
Tertiary Qualification		0.458*** (0.031)	0.446*** (0.033)	0.490*** (0.036)	0.476*** (0.040)
Major Statistical Region					
Balance NSW & ACT		-0.044 (0.039)	-0.019 (0.040)	-0.070 (0.049)	-0.047 (0.050)
Melbourne		-0.075* (0.040)	-0.074* (0.040)	-0.132** (0.052)	-0.126** (0.051)
Balance VIC & TAS		-0.080 (0.050)	-0.074 (0.051)	-0.155** (0.062)	-0.154** (0.063)
Brisbane		-0.154*** (0.044)	-0.133*** (0.045)	-0.194*** (0.058)	-0.167*** (0.060)
Balance QLD & NT		-0.105** (0.044)	-0.083* (0.045)	-0.169*** (0.054)	-0.142** (0.055)
South Australia		-0.145*** (0.040)	-0.126*** (0.042)	-0.200*** (0.050)	-0.190*** (0.052)
Western Australia		-0.001 (0.045)	0.003 (0.046)	-0.036 (0.058)	-0.027 (0.057)
Remoteness Area					
Inner Regional		-0.110*** (0.030)	-0.110*** (0.031)	-0.091** (0.039)	-0.098** (0.040)
Outer Regional & Remote		-0.054 (0.040)	-0.047 (0.043)	-0.034 (0.049)	-0.033 (0.052)
Country of Birth					
Other English Speaking		-0.053 (0.049)	-0.046 (0.050)	-0.022 (0.062)	-0.006 (0.061)
Non-English Speaking		-0.022 (0.048)	-0.005 (0.049)	-0.080 (0.051)	-0.063 (0.052)

Personality					
Extroversion			0.020*		0.016
			(0.011)		(0.014)
Agreeableness			-0.015		-0.040**
			(0.013)		(0.017)
Conscientiousness			0.016		0.020
			(0.011)		(0.014)
Neuroticism			0.002		0.013
			(0.010)		(0.012)
Openness			0.011		0.013
			(0.011)		(0.015)
Background Characteristics					
Lived with both parents				-0.020	0.016
				(0.033)	(0.032)
Father employed historic				0.054	0.017
				(0.054)	(0.050)
Mother employed historic				0.021	0.024
				(0.029)	(0.030)
Year					
2006	-0.003	0.005	0.010	-0.009	-0.010
	(0.022)	(0.021)	(0.022)	(0.025)	(0.026)
2007	0.020	0.023	0.034	0.039	0.046*
	(0.022)	(0.021)	(0.021)	(0.024)	(0.025)
2008	0.013	0.012	0.018	0.020	0.021
	(0.025)	(0.025)	(0.025)	(0.030)	(0.031)
2009	0.057**	0.063***	0.073***	0.058**	0.072**
	(0.025)	(0.024)	(0.024)	(0.029)	(0.029)
2010	0.109***	0.106***	0.110***	0.098***	0.096**
	(0.030)	(0.029)	(0.029)	(0.037)	(0.038)
2011	0.114***	0.107***	0.116***	0.091**	0.103**
	(0.032)	(0.030)	(0.031)	(0.044)	(0.045)
Constant	2.999***	2.783***	2.627***	2.767***	2.725***
	(0.044)	(0.051)	(0.110)	(0.084)	(0.142)
Observations	3,425	3,425	3,246	2,274	2,151
R-squared	0.037	0.196	0.194	0.200	0.201
Number of individuals	985	985	921	626	582

Notes: Models estimated using OLS, robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; left home aged 19-20, has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, 2005.

Male hourly wage rate robustness tests

Table A.22: Robustness tests of male hourly wage with continuous home leaving age

VARIABLES	(1)	(2)	(3)	(4)	(5)
Age Left Home	0.008 (0.005)	0.001 (0.004)	0.002 (0.004)	-0.005 (0.005)	-0.007 (0.005)
Work Experience	0.012*** (0.003)	0.018*** (0.003)	0.017*** (0.003)	0.021*** (0.004)	0.019*** (0.004)
Married		0.079*** (0.024)	0.077*** (0.026)	0.094*** (0.030)	0.092*** (0.031)
Education Level					
Completed High School		0.162*** (0.047)	0.161*** (0.050)	0.190*** (0.060)	0.176*** (0.064)
Post school Certificate		0.162*** (0.036)	0.157*** (0.038)	0.195*** (0.048)	0.192*** (0.050)
Tertiary Qualification		0.489*** (0.042)	0.490*** (0.045)	0.545*** (0.056)	0.546*** (0.059)
Major Statistical Region					
Balance NSW & ACT		-0.065 (0.048)	-0.063 (0.048)	-0.090 (0.057)	-0.085 (0.057)
Melbourne		-0.043 (0.043)	-0.046 (0.045)	-0.055 (0.054)	-0.045 (0.056)
Balance VIC & TAS		-0.157*** (0.059)	-0.187*** (0.062)	-0.153** (0.069)	-0.189** (0.073)
Brisbane		-0.118*** (0.044)	-0.132*** (0.046)	-0.107* (0.055)	-0.120** (0.056)
Balance QLD & NT		-0.031 (0.050)	-0.066 (0.050)	-0.073 (0.060)	-0.115* (0.059)
South Australia		-0.072* (0.041)	-0.085** (0.042)	-0.087* (0.051)	-0.095* (0.052)
Western Australia		0.058 (0.052)	0.055 (0.053)	0.042 (0.061)	0.046 (0.062)
Remoteness Area					
Inner Regional		-0.060* (0.035)	-0.058 (0.037)	-0.068* (0.041)	-0.065 (0.043)
Outer Regional & Remote		-0.057 (0.047)	-0.014 (0.045)	-0.076 (0.057)	-0.024 (0.054)
Country of Birth					
Other English Speaking		0.136*** (0.048)	0.141*** (0.047)	0.146*** (0.054)	0.154*** (0.053)
Non-English Speaking		-0.082 (0.052)	-0.081 (0.053)	-0.096* (0.056)	-0.092 (0.058)
Personality					
Extroversion			-0.015 (0.013)		-0.013 (0.016)
Agreeableness			-0.041*** (0.015)		-0.035** (0.016)
Conscientiousness			0.025* (0.013)		0.021 (0.017)

Neuroticism			0.017 (0.013)		0.014 (0.016)
Openness			0.004 (0.015)		-0.007 (0.018)
Background Characteristics					
Lived with both parents				0.009 (0.037)	0.009 (0.038)
Father employed historic				-0.013 (0.075)	0.017 (0.076)
Mother employed historic				0.045 (0.031)	0.039 (0.031)
Year					
2006	-0.009 (0.019)	-0.014 (0.018)	-0.023 (0.019)	-0.023 (0.022)	-0.032 (0.022)
2007	0.056*** (0.019)	0.041** (0.018)	0.033* (0.019)	0.039* (0.021)	0.034 (0.022)
2008	0.057*** (0.021)	0.041* (0.021)	0.042* (0.022)	0.026 (0.024)	0.028 (0.025)
2009	0.075*** (0.022)	0.056*** (0.021)	0.054** (0.022)	0.028 (0.026)	0.030 (0.026)
2010	0.092*** (0.025)	0.084*** (0.024)	0.082*** (0.025)	0.035 (0.031)	0.037 (0.032)
2011	0.102*** (0.026)	0.101*** (0.025)	0.099*** (0.026)	0.050 (0.033)	0.056* (0.033)
Constant	2.792*** (0.102)	2.696*** (0.106)	2.645*** (0.164)	2.819*** (0.152)	2.780*** (0.216)
Observations	3,522	3,520	3,283	2,477	2,319
R-squared	0.027	0.212	0.232	0.233	0.255
Number of individuals	880	879	800	584	536

Notes: Models estimated using OLS, robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, 2005.

Table A.23: Robustness tests of male hourly wage with dummy home leaving age

VARIABLES	(1)	(2)	(3)	(4)	(5)
Left home older than 20	0.032 (0.028)	-0.009 (0.025)	-0.008 (0.026)	-0.051 (0.031)	-0.055* (0.032)
Work Experience	0.012*** (0.003)	0.018*** (0.003)	0.018*** (0.003)	0.021*** (0.004)	0.020*** (0.004)
Married		0.080*** (0.024)	0.077*** (0.026)	0.095*** (0.030)	0.093*** (0.031)
Education Level					
Completed High School		0.163*** (0.047)	0.162*** (0.050)	0.188*** (0.060)	0.173*** (0.064)
Post school Certificate		0.163*** (0.036)	0.158*** (0.039)	0.196*** (0.048)	0.192*** (0.050)
Tertiary Qualification		0.490*** (0.042)	0.491*** (0.045)	0.547*** (0.056)	0.548*** (0.059)
Major Statistical Region					
Balance NSW & ACT		-0.069 (0.047)	-0.066 (0.048)	-0.093 (0.057)	-0.086 (0.057)
Melbourne		-0.043 (0.043)	-0.046 (0.045)	-0.053 (0.054)	-0.043 (0.056)
Balance VIC & TAS		-0.160*** (0.059)	-0.190*** (0.062)	-0.158** (0.069)	-0.192*** (0.073)
Brisbane		-0.122*** (0.044)	-0.136*** (0.045)	-0.107** (0.054)	-0.120** (0.055)
Balance QLD & NT		-0.036 (0.050)	-0.071 (0.050)	-0.078 (0.060)	-0.119** (0.059)
South Australia		-0.075* (0.040)	-0.088** (0.042)	-0.089* (0.051)	-0.096* (0.052)
Western Australia		0.054 (0.051)	0.051 (0.053)	0.038 (0.061)	0.043 (0.061)
Remoteness Area					
Inner Regional		-0.062* (0.035)	-0.060 (0.037)	-0.067 (0.041)	-0.063 (0.043)
Outer Regional & Remote		-0.059 (0.047)	-0.016 (0.045)	-0.077 (0.057)	-0.024 (0.054)
Country of Birth					
Other English Speaking		0.134*** (0.048)	0.139*** (0.047)	0.146*** (0.054)	0.153*** (0.053)
Non-English Speaking		-0.080 (0.052)	-0.078 (0.053)	-0.098* (0.057)	-0.093 (0.058)
Personality					
Extroversion			-0.015 (0.013)		-0.013 (0.016)
Agreeableness			-0.041*** (0.014)		-0.036** (0.016)
Conscientiousness			0.024* (0.013)		0.021 (0.017)

Neuroticism			0.017 (0.013)		0.014 (0.016)
Openness			0.004 (0.015)		-0.006 (0.018)
Background Characteristics					
Lived with both parents				0.008 (0.037)	0.008 (0.038)
Father employed historic				-0.018 (0.074)	0.012 (0.076)
Mother employed historic				0.045 (0.031)	0.039 (0.031)
Year					
2006	-0.009 (0.019)	-0.013 (0.018)	-0.022 (0.019)	-0.023 (0.022)	-0.033 (0.022)
2007	0.056*** (0.019)	0.041** (0.019)	0.034* (0.019)	0.038* (0.021)	0.033 (0.022)
2008	0.058*** (0.021)	0.042** (0.021)	0.042* (0.022)	0.025 (0.024)	0.027 (0.025)
2009	0.076*** (0.023)	0.057*** (0.021)	0.055** (0.022)	0.026 (0.026)	0.028 (0.026)
2010	0.094*** (0.025)	0.085*** (0.024)	0.083*** (0.025)	0.034 (0.031)	0.035 (0.032)
2011	0.104*** (0.027)	0.102*** (0.026)	0.100*** (0.026)	0.048 (0.033)	0.053 (0.033)
Constant	3.059*** (0.037)	2.770*** (0.060)	2.840*** (0.133)	2.705*** (0.100)	2.794*** (0.172)
Observations	3,522	3,520	3,283	2,477	2,319
R-squared	0.025	0.212	0.232	0.235	0.257
Number of individuals	880	879	800	584	536

Notes: Models estimated using OLS, robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, 2005.

Table A.24: Robustness tests of male hourly wage with four categories of home leaving age

VARIABLES	(1)	(2)	(3)	(4)	(5)
Age Left Home					
15-18	0.036 (0.040)	-0.028 (0.033)	-0.028 (0.034)	-0.043 (0.038)	-0.041 (0.038)
21-22	0.011 (0.044)	-0.045 (0.038)	-0.033 (0.038)	-0.080* (0.046)	-0.068 (0.046)
23-28	0.085** (0.043)	-0.016 (0.037)	-0.022 (0.037)	-0.080* (0.046)	-0.095** (0.045)
Work Experience	0.011*** (0.003)	0.018*** (0.003)	0.018*** (0.003)	0.021*** (0.004)	0.020*** (0.004)
Married		0.081*** (0.024)	0.079*** (0.026)	0.098*** (0.030)	0.097*** (0.031)
Education Level					
Completed High School		0.159*** (0.048)	0.158*** (0.051)	0.181*** (0.060)	0.167*** (0.064)
Post school Certificate		0.161*** (0.036)	0.156*** (0.039)	0.193*** (0.048)	0.190*** (0.050)
Tertiary Qualification		0.490*** (0.042)	0.492*** (0.045)	0.550*** (0.056)	0.551*** (0.059)
Major Statistical Region					
Balance NSW & ACT		-0.064 (0.048)	-0.066 (0.049)	-0.096 (0.059)	-0.096* (0.058)
Melbourne		-0.040 (0.044)	-0.045 (0.045)	-0.052 (0.055)	-0.045 (0.058)
Balance VIC & TAS		-0.156*** (0.060)	-0.189*** (0.063)	-0.158** (0.071)	-0.199*** (0.075)
Brisbane		-0.118*** (0.045)	-0.135*** (0.046)	-0.110** (0.056)	-0.128** (0.057)
Balance QLD & NT		-0.032 (0.051)	-0.071 (0.051)	-0.083 (0.061)	-0.128** (0.060)
South Australia		-0.073* (0.041)	-0.089** (0.042)	-0.093* (0.052)	-0.103* (0.053)
Western Australia		0.057 (0.052)	0.052 (0.053)	0.036 (0.061)	0.039 (0.062)
Remoteness Area					
Inner Regional		-0.062* (0.035)	-0.059 (0.037)	-0.066 (0.041)	-0.062 (0.043)
Outer Regional & Remote		-0.059 (0.047)	-0.016 (0.045)	-0.076 (0.057)	-0.022 (0.054)
Country of Birth					
Other English Speaking		0.136*** (0.048)	0.140*** (0.047)	0.143*** (0.054)	0.149*** (0.053)
Non-English Speaking		-0.083 (0.052)	-0.081 (0.053)	-0.104* (0.057)	-0.099* (0.059)
Personality					
Extroversion			-0.015 (0.013)		-0.014 (0.016)

Agreeableness			-0.041***		-0.035**
			(0.014)		(0.016)
Conscientiousness			0.024*		0.020
			(0.013)		(0.017)
Neuroticism			0.016		0.013
			(0.013)		(0.016)
Openness			0.004		-0.007
			(0.015)		(0.018)
Background Characteristics					
Lived with both parents				0.009	0.010
				(0.036)	(0.038)
Father employed historic				-0.020	0.008
				(0.074)	(0.075)
Mother employed historic				0.046	0.040
				(0.031)	(0.031)
Year					
2006	-0.009	-0.014	-0.023	-0.024	-0.033
	(0.019)	(0.018)	(0.019)	(0.021)	(0.022)
2007	0.057***	0.041**	0.033*	0.037*	0.032
	(0.019)	(0.018)	(0.019)	(0.021)	(0.022)
2008	0.058***	0.041*	0.041*	0.024	0.025
	(0.021)	(0.021)	(0.022)	(0.024)	(0.025)
2009	0.077***	0.055**	0.053**	0.024	0.026
	(0.022)	(0.021)	(0.022)	(0.026)	(0.026)
2010	0.094***	0.083***	0.081***	0.032	0.033
	(0.025)	(0.024)	(0.025)	(0.031)	(0.032)
2011	0.105***	0.100***	0.099***	0.045	0.052
	(0.026)	(0.025)	(0.026)	(0.033)	(0.033)
Constant	3.041***	2.787***	2.863***	2.735***	2.839***
	(0.041)	(0.064)	(0.133)	(0.104)	(0.171)
Observations	3,522	3,520	3,283	2,477	2,319
R-squared	0.029	0.213	0.233	0.236	0.258
Number of individuals	880	879	800	584	536

Notes: Models estimated using OLS, robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; left home aged 19-20, has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, 2005.

Social outcomes regressions

Table A.25: Female coupling (married or de-facto) full regressions

VARIABLES	Continuous home leaving age		Zero/one dummy variable		Four categories of home leaving	
	Baseline	Controls	Baseline	Controls	Baseline	Controls
Age Left home	-0.008 (0.013)	-0.029* (0.016)				
Left home older than 20			-0.091 (0.059)	-0.149** (0.067)		
Age left home						
15-18					-0.113 (0.095)	-0.056 (0.109)
21-22					-0.146* (0.078)	-0.189** (0.090)
23-28					-0.102 (0.087)	-0.139 (0.109)
Age	0.037*** (0.013)	0.046*** (0.014)	0.039*** (0.011)	0.037*** (0.013)	0.034*** (0.013)	0.033** (0.014)
Education Level						
Completed High School		0.177** (0.089)		0.192** (0.085)		0.200** (0.084)
Post school Certificate		0.095 (0.095)		0.107 (0.094)		0.110 (0.094)
Tertiary Qualification		0.026 (0.106)		0.054 (0.107)		0.061 (0.107)
Major Statistical Region						
Balance NSW & ACT		-0.078 (0.128)		-0.051 (0.128)		-0.035 (0.127)
Melbourne		-0.157 (0.111)		-0.155 (0.114)		-0.148 (0.115)

Balance VIC & TAS	-0.275*	-0.252*	-0.233
	(0.148)	(0.152)	(0.152)
Brisbane	-0.089	-0.110	-0.109
	(0.135)	(0.137)	(0.136)
Balance QLD & NT	-0.013	-0.007	0.012
	(0.126)	(0.127)	(0.125)
South Australia	-0.343***	-0.351***	-0.340***
	(0.128)	(0.130)	(0.131)
Western Australia	0.183*	0.172*	0.170
	(0.098)	(0.104)	(0.105)
Remoteness Area			
Inner Regional	-0.155	-0.176*	-0.188*
	(0.103)	(0.106)	(0.107)
Outer Regional & Remote	-0.191	-0.200	-0.211*
	(0.122)	(0.125)	(0.122)
Country of Birth			
Other English Speaking	0.070	0.044	0.030
	(0.143)	(0.161)	(0.169)
Non-English Speaking	-0.035	-0.032	-0.035
	(0.139)	(0.139)	(0.139)
Personality			
Extroversion	-0.061*	-0.063*	-0.065**
	(0.032)	(0.032)	(0.032)
Agreeableness	0.084**	0.082**	0.078*
	(0.041)	(0.041)	(0.042)
Conscientiousness	0.038	0.035	0.031
	(0.031)	(0.032)	(0.033)
Neuroticism	-0.026	-0.025	-0.025
	(0.034)	(0.034)	(0.035)
Openness	-0.016	-0.010	-0.006
	(0.038)	(0.038)	(0.038)

Background Characteristics						
Relationship with parents		0.052***		0.050***		0.050***
		(0.018)		(0.017)		(0.017)
Log relative HH income		0.021		0.025		0.024
		(0.063)		(0.061)		(0.061)
Lived with both parents		0.240**		0.233**		0.230**
		(0.098)		(0.100)		(0.100)
Parents Highest Education						
Completed High School		0.111		0.097		0.091
		(0.135)		(0.136)		(0.141)
Post school Certificate		-0.041		-0.048		-0.051
		(0.086)		(0.086)		(0.086)
Tertiary Qualification		-0.085		-0.113		-0.118
		(0.109)		(0.109)		(0.110)
Observations	892	692	892	692	892	692
Pseudo R-squared	0.0190	0.182	0.0230	0.187	0.0263	0.188

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, parents did not complete high school. Models estimated using probit regression and marginal effects presented.

Table A.26: Male coupling (married or de-facto) full regressions

VARIABLES	Continuous home leaving age		Zero/one dummy variable		Four categories of home leaving	
	Baseline	Controls	Baseline	Baseline	Controls	Baseline
Age Left home	0.014 (0.013)	-0.003 (0.016)				
Left home older than 20			0.043 (0.064)	-0.053 (0.075)		
Age left home						
15-18					-0.116 (0.102)	-0.208* (0.123)
21-22					0.031 (0.078)	-0.092 (0.094)
23-28					-0.007 (0.081)	-0.139 (0.097)
Age	0.024* (0.012)	0.043*** (0.014)	0.031*** (0.012)	0.045*** (0.013)	0.034*** (0.012)	0.048*** (0.014)
Education Level						
Completed High School		-0.201* (0.108)		-0.203* (0.107)		-0.204* (0.108)
Post school Certificate		-0.238** (0.100)		-0.237** (0.099)		-0.242** (0.100)
Tertiary Qualification		-0.179 (0.114)		-0.185* (0.112)		-0.197* (0.113)
Major Statistical Region						
Balance NSW & ACT		0.109 (0.110)		0.106 (0.109)		0.082 (0.113)
Melbourne		0.260*** (0.077)		0.262*** (0.077)		0.251*** (0.078)

Balance VIC & TAS	-0.246 (0.188)	-0.257 (0.185)	-0.280 (0.181)
Brisbane	0.259*** (0.087)	0.260*** (0.088)	0.250*** (0.091)
Balance QLD & NT	-0.137 (0.152)	-0.140 (0.152)	-0.158 (0.151)
South Australia	-0.234* (0.139)	-0.236* (0.139)	-0.256* (0.139)
Western Australia	0.009 (0.121)	0.013 (0.121)	0.004 (0.123)
Remoteness Area			
Inner Regional	0.055 (0.124)	0.056 (0.123)	0.060 (0.121)
Outer Regional & Remote	0.159 (0.105)	0.162 (0.104)	0.153 (0.105)
Country of Birth			
Other English Speaking	0.040 (0.167)	0.035 (0.165)	0.045 (0.164)
Non-English Speaking	-0.063 (0.169)	-0.060 (0.170)	-0.071 (0.169)
Personality			
Extroversion	0.100*** (0.036)	0.100*** (0.036)	0.103*** (0.036)
Agreeableness	-0.030 (0.041)	-0.031 (0.042)	-0.035 (0.042)
Conscientiousness	0.004 (0.035)	0.002 (0.035)	-0.001 (0.035)
Neuroticism	0.016 (0.040)	0.013 (0.040)	0.012 (0.040)
Openness	-0.032 (0.033)	-0.030 (0.033)	-0.027 (0.033)

Background Characteristics						
Relationship with parents		0.028		0.028		0.026
		(0.020)		(0.020)		(0.020)
Log relative HH income		-0.003		-0.001		-0.003
		(0.060)		(0.059)		(0.059)
Lived with both parents		0.167		0.174		0.184*
		(0.107)		(0.106)		(0.107)
Parents Highest Education						
Completed High School		0.029		0.031		0.021
		(0.122)		(0.122)		(0.121)
Post school Certificate		0.007		0.002		-0.018
		(0.096)		(0.096)		(0.096)
Tertiary Qualification		-0.067		-0.071		-0.080
		(0.098)		(0.098)		(0.097)
Observations	957	758	957	758	957	758
Pseudo R-squared	0.0244	0.142	0.0235	0.143	0.0262	0.150

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; has not completed high school, lives in Sydney, lives in a major Australian city, born in Australia, parents did not complete high school. Models estimated using probit regression and marginal effects presented.

Table A.27: Female higher education full regressions

VARIABLES	Continuous home leaving age		Zero/one dummy variable		Four categories of home leaving	
	Baseline	Controls	Baseline	Controls	Baseline	Controls
Age Left home	0.020 (0.013)	0.017 (0.016)				
Left home older than 20			0.098 (0.065)	0.108 (0.075)		
Age left home						
15-18					-0.103 (0.098)	0.075 (0.075)
21-22					0.034 (0.074)	0.105 (0.073)
23-28					0.131 (0.081)	0.185** (0.083)
Age	0.020 (0.013)	0.021* (0.011)	0.028** (0.012)	0.025* (0.013)	0.016 (0.013)	0.015 (0.010)
Major Statistical Region						
Balance NSW & ACT		-0.027 (0.124)		-0.042 (0.123)		-0.047 (0.128)
Melbourne		0.005 (0.121)		0.014 (0.121)		0.011 (0.119)
Balance VIC & TAS		-0.001 (0.127)		-0.015 (0.129)		-0.014 (0.132)
Brisbane		0.236*** (0.038)		0.238*** (0.037)		0.237*** (0.037)
Balance QLD & NT		0.058 (0.110)		0.052 (0.108)		0.059 (0.111)
South Australia		0.090 (0.103)		0.099 (0.097)		0.111 (0.094)

Western Australia	0.126 (0.100)	0.135 (0.094)	0.138 (0.093)
Remoteness Area			
Inner Regional	0.016 (0.086)	0.032 (0.083)	0.035 (0.082)
Outer Regional & Remote	-0.013 (0.107)	0.007 (0.105)	0.014 (0.102)
Country of Birth			
Other English Speaking	0.191*** (0.058)	0.194*** (0.054)	0.193*** (0.051)
Non-English Speaking	0.025 (0.166)	0.016 (0.173)	0.017 (0.167)
Personality			
Extroversion	-0.049* (0.028)	-0.049* (0.028)	-0.048* (0.029)
Agreeableness	0.020 (0.046)	0.022 (0.047)	0.022 (0.049)
Conscientiousness	0.026 (0.031)	0.027 (0.030)	0.022 (0.031)
Neuroticism	0.059** (0.030)	0.059** (0.030)	0.061** (0.030)
Openness	0.114*** (0.037)	0.110*** (0.037)	0.114*** (0.038)
Background Characteristics			
Relationship with parents	-0.012 (0.017)	-0.011 (0.018)	-0.010 (0.018)
Log relative HH income	0.100 (0.063)	0.096 (0.064)	0.096 (0.062)
Lived with both parents	0.091 (0.097)	0.095 (0.096)	0.095 (0.097)

Parents Highest Education						
Completed High School		0.227*** (0.036)		0.228*** (0.036)		0.225*** (0.036)
Post school Certificate		0.246*** (0.075)		0.251*** (0.073)		0.249*** (0.072)
Tertiary Qualification		0.226*** (0.074)		0.235*** (0.073)		0.237*** (0.072)
Observations	892	692	892	692	892	692
Pseudo R-squared	0.0377	0.247	0.0392	0.251	0.0466	0.257

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; grew up in Sydney, grew up in a major Australian city, born in Australia, parents did not complete high school. Models estimated using probit regression and marginal effects presented.

Table A.28: Male higher education full regressions

VARIABLES	Continuous home leaving age		Zero/one dummy variable		Four categories of home leaving	
	Baseline	Controls	Baseline	Baseline	Controls	Baseline
Age Left home	0.023*	0.040**				
	(0.013)	(0.017)				
Left home older than 20			0.031	0.019		
			(0.068)	(0.079)		
Age left home						
15-18					-0.132	-0.186
					(0.112)	(0.132)
21-22					-0.000	-0.056
					(0.084)	(0.097)
23-28					0.001	0.023
					(0.084)	(0.099)
Age	0.031***	0.041***	0.046***	0.067***	0.046***	0.060***
	(0.012)	(0.012)	(0.012)	(0.013)	(0.012)	(0.013)
Major Statistical Region						
Balance NSW & ACT		0.226***		0.222***		0.222***
		(0.078)		(0.078)		(0.080)
Melbourne		-0.017		-0.011		0.009
		(0.124)		(0.119)		(0.117)
Balance VIC & TAS		-0.152		-0.144		-0.172
		(0.211)		(0.205)		(0.210)
Brisbane		0.112		0.101		0.114
		(0.114)		(0.118)		(0.114)
Balance QLD & NT		0.030		0.024		0.018
		(0.145)		(0.144)		(0.147)
South Australia		0.004		-0.002		-0.000
		(0.151)		(0.148)		(0.151)

Western Australia	0.060 (0.124)	0.058 (0.127)	0.063 (0.123)
Remoteness Area			
Inner Regional	-0.044 (0.125)	-0.079 (0.129)	-0.067 (0.127)
Outer Regional & Remote	-0.130 (0.148)	-0.177 (0.151)	-0.160 (0.150)
Country of Birth			
Other English Speaking	0.167 (0.108)	0.132 (0.132)	0.150 (0.118)
Non-English Speaking	-0.328* (0.199)	-0.326 (0.203)	-0.339* (0.199)
Personality			
Extroversion	-0.013 (0.034)	-0.013 (0.034)	-0.015 (0.035)
Agreeableness	0.003 (0.042)	0.002 (0.042)	0.001 (0.042)
Conscientiousness	0.125*** (0.037)	0.123*** (0.037)	0.122*** (0.037)
Neuroticism	0.112*** (0.038)	0.103*** (0.037)	0.104*** (0.037)
Openness	0.008 (0.036)	0.006 (0.035)	0.010 (0.036)
Background Characteristics			
Relationship with parents	0.004 (0.021)	0.004 (0.021)	0.003 (0.021)
Log relative HH income	0.073 (0.068)	0.083 (0.067)	0.081 (0.067)
Lived with both parents	-0.047 (0.121)	-0.040 (0.119)	-0.034 (0.122)

Parents Highest Education

Completed High School		0.179**		0.193***		0.178**
		(0.077)		(0.072)		(0.076)
Post school Certificate		-0.041		-0.032		-0.043
		(0.108)		(0.105)		(0.107)
Tertiary Qualification		0.188*		0.186*		0.177*
		(0.098)		(0.095)		(0.096)
Observations	957	758	957	758	957	758
Pseudo R-squared	0.0530	0.249	0.0483	0.234	0.0513	0.242

Notes: Robust standard errors in parenthesis clustered by the individual. Significance levels; * p<0.1, ** p<0.05, *** p<0.01. Omitted variables; grew up in Sydney, grew up in a major Australian city, born in Australia, parents did not complete high school. Models estimated using probit regression and marginal effects presented.