

**HOUSING AND THE TRANSITION INTO ADULTHOOD –
AUSTRALIAN EVIDENCE**

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NON-TECHNICAL SUMMARY

In Australia and other countries young adults are spending increasing periods of time in the parental home. The pattern reflects a range of social, demographic and economic influences. For example, younger cohorts are spending longer periods in education and delaying fertility. Where individuals do enter full-time employment, they are facing an increasingly precarious labour market. The experience of older cohorts who exhibited a stylised transition from the parental home into rental accommodation and subsequently homeownership is increasingly challenging in housing markets characterised by rapidly rising house prices.

The transition from the parental household has traditionally been seen as one of the markers that define the transition into adulthood. The establishment of an independent household brings with it challenges and opportunities. While housing costs are likely to be higher, living independently from parents brings greater privacy and the need to develop life skills around budgeting and management. We argue that housing independence may be considered along a continuum which takes into account not simply where individuals are living, but also the responsibility they bear for housing and related expenses. In doing so, we create a categorisation of housing independence that encompasses where individuals reside and the responsibility taken for housing-related costs. We examine housing independence using two datasets, namely the Longitudinal Survey of Australian Children (LSAC) and the Household Income and Labour Dynamics in Australia (HILDA) data. Together these data provide insight into the housing experiences of young Australians as they leave secondary education and transition into adulthood.

We find evidence of disparities in housing outcomes by socio-economic status (SES) and gender. For young adults whose parents are high SES, there is a significantly higher likelihood they will report coresiding without contributing to housing expenses. This disparity is large and more pronounced for women, for whom the SES gap is 30 percentage points, than for men, for whom the SES gap is 25 percentage points. Conversely, where parents have low income or lower levels of education, adult children are significantly more likely to coreside and contribute to housing expenses through the payment of board. The difference is large, in the order of 25 percentage points greater than their high SES counterparts. Further, low SES young women are more likely to have left the parental home and not receive any accommodation support compared to high SES young women. Additionally, we find evidence that the presence of parental-child conflict makes coresidence less likely.



Housing is a critical mediating influence for outcomes related to education, employment, health and financial stress. Accessibility to affordable and secure housing provides opportunities to accumulate human capital and savings, and consequently opportunities over the life-cycle. Ideally, policy will be designed in a way that reflects the housing circumstances of young adults so as to support opportunities around education and welfare more broadly.



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ABSTRACT

Traditionally the establishment of a household independent of one's parents has been an important marker of the transition into adulthood. In Australia as in other countries, younger cohorts are spending increasing time in the parental household reflecting a range of social, demographic and economic influences. Housing plays a critical mediating role in the transition into adulthood and the housing experience of young adults is likely to have immediate implications for their health and welfare, and potential lasting impacts over the life-cycle. We analyse the housing experiences of young adults as they transition from secondary education, developing a concept of housing independence that reflects where young adults reside and the responsibility taken for housing related expenses. We find that housing experiences and the support offered by parents is closely linked to choices around education. The analysis identifies evidence of a socio-economic gradient in the housing experiences and support offered to younger Australians.

Keywords: Housing independence; coresidence; parental support.

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1. Introduction

There is evidence in Australia and internationally of a greater propensity for young adults to reside in the parental household. In Australia, the decades spanning 1981 and 2011 saw the proportion of individuals aged 20-24 years living with parents increase from around 36 percent to over 43 percent, while the proportion of those aged 25-29 years coresiding approximately doubled¹. In some instances this pattern corresponds with a delayed exit from the parental home; in the case of so called 'boomerang kids', it reflects the greater likelihood that having left the parental home they subsequently return (Matsudaira 2016; South and Lei 2015). A variety of reasons have been identified across countries for this pattern including increasing levels of education and the debt associated with its attainment (Bleemer et al. 2014); postponement of childbearing and marriage; and, greater precariousness in the labour market. In the case of Australia, the United States and the United Kingdom one other important consideration appears to be the increasing cost of housing (Ermisch 1999; Ermisch and Di Salvo 1997; Dettling and Hsu 2018). In Australia, the Productivity Commission has identified the substantial savings gains that may accrue to those who reside in the parental household (Productivity Commission 2020).

For young adults the establishment of an independent household is accompanied by costs and benefits. Increased privacy and independence are likely to be offset by higher costs which may encompass payment of household expenditures for items such as food, utilities and maintenance, and, potentially lower quality housing. From a developmental perspective, establishment of housing independent of parents most likely means that young adults take on greater responsibility and develop important life skills such as budgeting (Sironi and Billari 2020).

Patterns of coresidency are important because of their broader implications for the transition into adulthood, development of economic independence from parents and subsequent life-cycle outcomes (Kirkpatrick 2013). The exit from the parental household is cited as one of the major and in some cases the final step in becoming an independent adult. Notwithstanding the pivotal role that housing plays in shaping the transition to adulthood, to date there has been little analysis of the determinants of housing independence among young adults (Arundel and Ronald 2016).

¹ <https://aifs.gov.au/facts-and-figures/young-people-living-their-parents>



This paper presents evidence on the housing outcomes and experiences of a representative sample of young Australians as they transition into adulthood. In doing so, it contributes to our understanding of the factors that are associated with the housing independence of young adults and the role of housing in shaping broader lifecycle outcomes. Understanding housing outcomes as individuals transition into adulthood is particularly relevant in the Australian context. A stylised housing career, albeit one which is becoming less typical, is one where individuals move into owner-occupation after a spell in rental accommodation following departure from the parental home (Arundel and Ronald 2016). Homeownership rates have traditionally been relatively high in Australia with owner-occupation playing an important role in the accumulation of wealth over the lifecycle and supporting living standards throughout retirement (Whelan, Atalay and Dynan 2018). Increasing real house prices especially in large urban centres such as Sydney has meant that younger cohorts of Australians are less likely to attain homeownership at the same age as their parents (Burke, Nygaard and Ralston 2020). The pathway into homeownership is becoming less structured and parents are playing an increasingly important role in facilitating housing outcomes for their children. The broader policy context is one in which the government has increasingly moved to shift the responsibility for supporting young adults to their parents rather than through public support, and higher rates of coresidence may be seen as a consequence of this development. Importantly, the capacity to provide housing support through co-residence or other measures is likely to differ significantly across households. That support and the housing outcomes experienced by young adults is likely to shape a range of outcomes over the life-cycle including education attainment, poverty (Assave et al. 2007; Parisi 2008), financial hardship (Ribar 2015), employment (Sironi and Billari 2020) and child bearing (Cobb-Clark and Ribar 2012; Parisi 2008).

In this paper we examine housing outcomes at a critical juncture in the life cycle, namely as teenagers enter young adulthood as they complete their secondary and tertiary education. We consider patterns of direct and indirect housing support provided by parents to their adult children either in the form of coresidence or financial transfers. The question of independence or autonomy is considered by focussing on where individuals reside and the responsibility taken for meeting housing-related costs. While descriptive, the analysis provides insight into how housing outcomes and the support offered to young Australians varies across a range of observable dimensions including socio-economic status and gender.

The analysis draws on two longitudinal surveys, namely the Longitudinal Survey of Australian Children (LSAC) and the Household Income and Labour Dynamics in Australia (HILDA). Specifically, LSAC is used to consider the degree to which young adults, as they complete secondary education, take responsibility for



housing costs. We do so by considering tenure outcomes and the financial support, if any, received from parents for housing-related costs. Second, the HILDA data is used to examine the transition into independent housing for individuals in their late teens to early twenties. The HILDA data set contains information on the nature of transfers received by children from their parents and provides an opportunity to examine various degrees of housing related independence or autonomy that young Australians attain over time. In both cases the analysis is descriptive and is intended to provide insights into the transition into housing independence experienced by young Australians. We identify distinctive patterns with respect to socioeconomic status (SES), gender, and geography. Specifically, the analysis shows that young Australians of high SES background are more likely to receive full housing support from their parents in the form of coresidence compared to those from low SES background, who are more likely to have responsibility for housing expenses when coresiding with their parents. Low SES young women, in particular, are more likely to exit the parental home and not receive any direct transfers for housing expenses, compared to high SES young women. Moreover, we find that young Australians living in major cities are more likely to receive parental housing support.

A deeper understanding of the housing experiences of young adults provides insight into how parents facilitate and support their children's transition into adulthood. Whereas remaining in the parental household may be associated with more limited autonomy and independence in the short term, it may enhance long term economic security by facilitating the accumulation of human capital and savings. Hence, SES disparities in parental support around housing is potentially an important mechanism for the transmission of socioeconomic disadvantage. At the same time, delayed establishment of independent households may inhibit the development of life skills associated with navigating adulthood.

The remainder of this paper is set out as follows. In section 2 we consider the meaning of adulthood and the concept of financial autonomy or independence. Particular attention is paid to how housing shapes the transition into adulthood. Following this in section 3 we describe the data used in the analyses. Section 4 presents evidence from LSAC on the living arrangements and housing related financial support received from parents of a cohort of Australians in their late teens as they transition out of high school. In section 5 the HILDA data is used to describe the nature of housing-related transitions for a set of young Australians aged 18 to 25 years of age. Section 6 sets out some conclusions from the analysis.



2. Adulthood, financial autonomy and financial independence

There is no settled definition of what constitutes adulthood in the literature. Rather it is identified as multi-dimensional and encompasses both objective and subjective measures. Traditional 'objective' markers of adulthood have included milestones such as the completion of full-time education, entering into full-time employment, exiting the parental home, partnering or cohabiting and childbearing (Manzoni 2016; Sironi and Fustenberg 2012). Subjective measures of adulthood include a recognition by individuals of the consequences of actions or decisions, and, a perception by the individual that they have taken on adult roles and responsibilities (Benson and Furstenberg 2006). The multifaceted nature of adulthood highlights that there are varying degrees by which individuals can take on adult roles or responsibilities and in doing so establish independence from existing familial relationships. Where there does appear to be a consensus is that the transition into adulthood appears to be more prolonged and is less linear than was the case for earlier generations (Arundel and Ronald 2015; Benson and Furstenberg 2006; Manzoni 2016).

Existing literature also recognises that the transition into adulthood is one that reflects not simply the decisions and outcomes of the emerging adult, but also the context and support provided by parents. Parents may provide financial support either directly or through in-kind transfers, but also emotional or intangible support that young adults can draw upon as they navigate the complexities associated with developing independence and taking on responsibilities (Jorgensen et al. 2017; Lundberg, Romich and Tsang 2009). That support is likely to be critical in shaping the choices and decision-making process of young adults through a complex interplay that reflects the preferences of children and parents, resources and parental aspirations for the child.

The housing experience of young adults is likely to be important during the transition into adulthood given its role in mediating outcomes such as education, employment, health and financial stress (Ribar 2015). Housing represents a large component of the household budget and coresidence provides an opportunity for parents to provide financial and emotional support to children that have cognitive, behavioural, emotional and economic consequences over the lifecycle (Cobb-Clark and Ribar 2012). Conversely, independent living creates opportunities for young adults to develop skills and strategies which are critical over the lifecycle, and which may be valuable in a variety of settings including the labour market (Sironi and Ballari 2019).



From an economic perspective one of the key markers of adulthood identified in the existing literature is the development of financial independence whereby young adults become less reliant on parental resources (Bea and Yi 2019). Botha et al (2020) argue that young adults' transition to financial independence may be characterised by greater agency or decision-making capacity along with responsibility for the consequences of those decisions (Lundberg, Romich and Tsang 2009). There is evidence that the development of such skills is important with incremental 'financial nest leaving' being associated with fewer financial problems, lower rates of poverty over the lifecycle (Bea and Yi 2019), and, improvements in economic self-efficacy (Lee and Mortimer 2009). In particular, Botha et al (2020) posit a distinction between financial independence and financial autonomy. The former concept seeks to measure the extent that young adults remain reliant on parental resources. In comparison, financial autonomy reflects a person's scope for financial action, or the agency to make financial decisions prior to attaining financial independence. We develop the notion of financial independence or autonomy by focussing on the housing experiences of young adults.

Housing Autonomy and Independence

Housing provides an opportunity for parents to shape the transition into adulthood and the development of financial independence or autonomy in a structured and incremental manner. For example, coresidency creates opportunities for young adults to develop financial autonomy in an environment where parents can provide oversight, emotional and financial support. Conversely, parents may provide support for young adults to live independently and accumulate human capital or other life skills associated with the transition into adulthood. Importantly the housing outcomes of young adults will reflect the preferences, resources and choices of both parents and their adult children.

That parents can take a pivotal role in determining the housing outcomes of their adult children has been formalised by models that capture the strategic nature of the interaction between parents and their offspring (Cobb-Clark and Ribar 2012; Manacorda and Moretti 2006; Ermisch 1999; Ermisch and Di Salvo 1997). Those interactions can be characterised by a principal-agent game in which altruistic parents offer support in a way designed to shape the choices of the child. For example, support may be conditional and designed to elicit or reward what may be considered positive behaviours, such as the accumulation of human capital, or dissuade risky behaviours (Hao et al. 2008). Similarly, Ermisch and Di Salvo (1997) argue that parents may manipulate transfers to induce (or dissuade) coresidence. Such behaviours may reflect the parents' own preferences for living with their adult child (Manacorda and Moretti 2006), a desire to



retain some supervision or management over the child's choices, or, resource and other economic constraints (Ermisch 1999; Ermisch and Di Salvo 1997).

Understanding housing circumstances in the transition to adulthood and the role of parental support is also informed by broader life-cycle circumstances. Departure from the parental home may be associated with the pursuit of education opportunities and be coupled with continued financial support from parents to assist with the cost of housing or other living expenses. In such a situation it is likely that the young adult remains financially reliant on parents and 'independent living' may be less concomitant with the immediate development of financial independence and autonomy (Manzoni 2016; Sironi and Furstenberg 2012). Alternatively, departure from the parental household may be coupled with partnering or participation in the labour force, reflect a desire to establish a more autonomous lifestyle, or be symptomatic with financial distress or relationship dissatisfaction within the parental household (Cobb-Clark and Ribar 2012). It is also possible that coresiding children exhibit significant degrees of financial independence and autonomy as they become less reliant on parental resources and exhibit agency in decisions making (Botha et al. 2020). For example, there may be an expectation or requirement that coresident children contribute to household resources either directly or indirectly through the payment of board or rent in addition to taking responsibility for personal expenditures.

What drives the housing outcomes of young adults? Existing studies show that the housing circumstances of young adults reflects a range of economic factors, institutional considerations and social norms. Studies from the United States (Matsudaira 2016) and Europe (Ermisch 1999; Ermisch and Di Salvo 1997; Arundel and Ronald 2016) indicate that higher housing costs are associated with a lower propensity of young adults to leave the parental household, and a greater propensity to return in the event of labour market shocks or life-events such as the breakdown of a relationship. Existing evidence also points to the economic resources of both parents and their children as being important for understanding who takes responsibility for housing costs (Cobb-Clark and Gørgens 2014; Ermisch 1999; Ermisch and Di Salvo 1997; Iacovou 2010). The size, quality and location of the parental home also appears to be an important factor determining if the young adult coresides (South and Lei 2015).

International evidence points to the role played by cultural norms, levels of financial support and the role of family in explaining coresidence patterns (Sironi and Billari 2019). In the case of Europe for example, there is evidence that young adults are less likely to have left the parental home in the southern European countries such as Italy and Greece (Manacorda and Moretti 2006). While social norms and the role of



familial ties appear to be important for understanding this pattern, other factors such as the availability of public support for independent living, housing markets, the nature of employment and the post-high school education environment also impact on the timing of departure from the parental home and propensity to return (Assave et al. 2002; Arundel and Ronald 2016; Iacovou 2010; Manzoni 2016).

In this paper we categorise the circumstances of young adults in a way that reflects varying degrees of housing independence or autonomy. To do so we focus on two aspects of housing outcomes, namely whether individuals coreside with parents and the responsibility taken for meeting housing-related costs. Unlike other studies, we distinguish between living in the parental home with or without contributions being made towards housing costs, and, living outside of the parental home with or without financial support for accommodation and related expenses from parents. We argue that limited housing independence is experienced by those residing in the parental home when there is no requirement to contribute to housing or related expenses. In such a situation the young adult remains fully dependent, at least in a housing domain, on parents and exhibits little or no autonomy. Conversely, young adults who have left the parental home and do not receive financial transfers from parents may be considered to be independent and exhibiting housing autonomy.

Manzoni (2016) posits a similar categorisation of residential and financial independence to that articulated above but ignores the possibility that a coresiding child may be asked to contribute to housing costs via the payment of board. Similarly, Whittington and Peters (1996) distinguish departures from the parental home by considering if such moves occur in conjunction with financial independence from parents. Amongst other things, the study by Whittington and Peters (1996) identified gendered patterns in the experience of young adults as they transition out of the parental home. A more recent Australian study by Chia and Erol (2021) differentiates between individuals who coreside with parents for zero cost and those who contribute to housing costs through the payment of board, but do not identify whether those who reside outside the parental home receive support for housing related costs. Arguably, an understanding of the range of housing outcomes experienced by those transitioning into adulthood will better inform our understanding of how housing and financial independence evolve over the life-cycle².

² The analyses presented in sections 4 and 5 do not consider the transition from housing independence to one of limited housing autonomy, a pattern which characterises what are termed 'boomerang kids' but which could also characterise other housing related transitions. A comprehensive analysis of such transitions would be valuable but is beyond the scope of this paper.



Among those coresiding with parents the motivation for the payment of board is likely to be varied. Parents and or children may see contributions towards household expenses as part of being an adult and the responsibilities that come with it. Moreover, it may facilitate parents exposing young adults to the demands or challenges of running a household in a low-risk setting. Alternatively, contributions to housing costs may be driven by the economic circumstances of the individuals within the household. An early study of students aged 15 to 20 years in Australia found that approximately one quarter of those living in the parental home were contributing to housing costs through the payment of board with approximately 14 percent contributing to other household expenses (Powles 1991). Notably, the proportion contributing was substantially lower for students in high SES households (21 percent) relative to low SES households (29 percent). The analysis in Chia and Erol (2021) examines housing outcomes in 2017 and finds evidence that enrolment in vocational studies is positively associated with coresidence coupled with the payment of board. Socio-economic status and resources more generally are likely to be an important consideration that shape the housing experiences of young adults (Cobb-Clark and Gørgens 2014). Coresidence with or without a requirement to contribute to housing costs may provide a cost-effective means by which parents can provide transfers to their children in lieu of direct monetary transfers. While such arrangements may be driven by altruistic motives that reflect parental resources (Angelini and Laferrère 2013), it may also play an important role as insurance mechanism in a precarious labour market or in the face of economic shocks (Bitler and Hoynes 2015; Kaplan 2012; Dettling and Hsu 2018; Lee and Painter 2013).

Exit from the parental home may or may not coincide with the attainment of financial autonomy or independence. Young adults who have left the parental household may be assisted with housing and related costs via direct financial transfers thereby limiting the degree of independence or autonomy exhibited. Like coresiding adult children, there is evidence that transfers to children living outside the parental household exhibit a socio-economic gradient with young adults from low socio-economic backgrounds being less likely to receive such transfers (Cobb-Clark and Gørgens 2014; Manzonni 2016). Where adult children live outside the parental household and do not receive financial or in-kind transfers, individuals may be considered to have established housing and financial autonomy.

3. Data and Methodology

To analyse the relationship between young Australians' personal and parental characteristics and their housing independence, we consider four possible housing outcomes defined by whether the young person coresides with parents and their responsibility for or contribution towards housing costs. The



analysis draws on two datasets, namely the Household Income and Labour Dynamics in Australia (HILDA) and Longitudinal Survey of Australian Children (LSAC). In terms of personal characteristics, previous studies on the transition into adulthood have identified distinctive gender patterns (Gillespie 2020). Evidence from Europe suggests that choices around partnering, education and engagement in the labour force differ by gender and this can have important implications for housing outcomes (Assave et al. 2002). There is also evidence that the gender of the young adult shapes the behaviour of parents. Whittington and Peters (1996) note that parental resources appear to be especially important for dissuading residential independence among young women.

Parental resources in the form of wealth and income also appear to be important for understanding transfers to children for housing and related expenses (Cobb-Clark and Gørgens 2014; Whittington and Peters 1996; Kaplan 2012; Ermisch 1999; Ermisch and Di Salvo 1997). While a strong positive association between the child's own income and greater housing independence has been identified (Matsudaira 2016), the relationship is less clear when considering parental resources. Higher income or wealth parents have opportunities to support children to remain in the parental household or alternatively, provide support for independent living. Ribar and Cobb-Clark (2012) find that parental homeownership is associated with a much lower likelihood that young adults leave the parental household. In some cases, parental housing support appears to be contingent on other activities such as participation in education (Manzoni 2016). Finally, economic constraints in the form of the cost of both rental and owner-occupied housing is a central consideration in the decision of young adults to form an independent household and the support offered by parents (Ermisch 1999; Ermisch and Di Salvo 1997). In the context of Australia where housing prices have exhibited a systemic increase over time, this may be a particularly pertinent consideration in the provision of housing-related support by parents.

(a) Housing independence among young adults – LSAC

The first component of the analysis considers the housing outcomes of a set of young adults as they complete secondary schooling. The analysis uses the LSAC, a biannual survey that began in 2004. The LSAC follows two cohorts of children: one born in 1999–2000 (the “K cohort” consisting of 4,983 children) and a second born in 2003–2004 (the “B cohort” consisting of 5,107 children). The LSAC collects a rich set of information about the children's skills, activities, demographics, parental background, and includes detailed information about living arrangements and financial support from parents.



In this study we focus on a sample drawn from the K cohort, focussing on the experiences of individuals aged 18 to 19 years in wave 8 of the survey (in 2018). The empirical models incorporate a number of characteristics measured at wave 7 (when the child was aged 16 years). The final sample includes observations on 2,487 young adults after excluding observations without responses on variables incorporated into the empirical specification. We classify the housing independence of respondents by focussing on two considerations, namely, where individuals reside and the responsibility taken for meeting housing-related costs. We have four possible housing independence outcomes, namely (i) residing in the parental home and not paying board; (ii) residing in the parental home and paying board; (iii) not residing in the parental home and receiving financial assistance from parents for accommodation; and, (iv) not residing in the parental home and not receiving parental accommodation assistance. A respondent who does not reside in the parental home is considered to be receiving parental assistance for accommodation if in the past year they have received parental support for purchasing real estate or for paying rent, or if they were living in a family members' investment property rent free (or for low rent). The housing outcomes defined by (i)-(iv) are mutually exclusive and exhaustive. Of interest is how each outcome is related to observable characteristics of the individual and their parents such as socio-economic background, gender and geographical location measured at age 16 or 18.

The approach used in the statistical analysis is a multinomial logit approach which facilitates modelling outcomes among a set of non-ordinal choices. With m possible outcomes, the probability that an individual i is observed in outcome j is given by the following probability:

$$p_{ij} = p(y_i = j) = \frac{\exp(w_i' \gamma_j)}{\sum_{k=1}^m \exp(w_i' \gamma_k)}$$

Where w represents a vector of observable characteristics and γ is a vector of estimated coefficients. The probabilities across the four outcomes specified sum to one. For estimation purposes the coefficients for one outcome are normalised to zero ($\gamma_j=0$) and a set of $m-1$ coefficients are estimated^{3,4}.

³ The models reported in section 4 are estimated using the `mlogit` command in Stata 16.0.

⁴ Note that the multi-nomial logistic specification maintains the constraint associated with the independence of irrelevant alternatives (IIA) assumption. That is, the relative probability of someone choosing between two options is independent of any additional alternatives in the choice set.



The analysis of housing outcomes presented in section 4 is descriptive in nature and seeks to identify the correlates of housing outcomes for young adults. That is, it is designed to provide insight into the process of establishing housing autonomy, and the influences which shape that outcome for young adults. Following similar papers in the literature we include in the empirical specification characteristics such as gender, the individuals' employment and education status, parental socioeconomic status and the quality of family relationships.

Summary statistics of the sample drawn from LSAC are presented in Table 1. As expected, a large majority of young adults (89 percent) report residing with at least one parent at age 18 or 19. For many individuals this will coincide with the completion of high school and in most cases they will not have established a residence separate from the parental home. In terms of gender differences, a number of patterns are apparent from Table 1. First, women are more likely to report coresiding with parents without contributing to housing costs (76 percent) compared to men (71 percent). By contrast, women are less likely to report coresiding with parents and contributing to housing costs (11 percent) compared to men (18 percent). It is also the case that women are more likely to report studying (53 percent) compared to men (46 percent) at age 18. Conversely, men are more likely to report employment earnings and are significantly more likely to be in the upper part of the earnings distribution at that age. The empirical analysis reported in section 4 explores the association between the various housing outcomes and the set of covariates reported in Table 1.



Table 1: LSAC sample

	Full sample	Men	Women
Coresiding with parents, no board or rent (18 years)	0.735	0.711	0.759
Coresiding with parents, paying board or rent (18 years)	0.151	0.188	0.114
Moved out, has accom. support/no rent (18 years)	0.054	0.049	0.060
Moved out, no accommodation support (18 years)	0.060	0.053	0.066
COVARIATES			
Combined parental income <\$500/wk (16 years)	0.046	0.054	0.038
Combined parental income \$500-\$999/wk (16 years)	0.101	0.100	0.102
Combined parental income \$1000-\$1999/wk (16 years)	0.261	0.247	0.276
Combined parental income \$2000-\$2999/wk (16 years)	0.274	0.284	0.264
Combined parental income \$3000+/wk (16 years)	0.318	0.315	0.320
Parent ed. level - High School Only (16 years)	0.092	0.090	0.093
Parent ed. level - Cert/Diploma (16 years)	0.413	0.411	0.416
Parent ed. level - Bachelor or above (16 years)	0.495	0.499	0.491
Parents do not own home (16 years)	0.187	0.184	0.190
Parents own home (outright or mortgage, 16 years)	0.813	0.816	0.810
Home is crowded (>1.5 people per bedroom, 16 years)	0.081	0.080	0.082
Main parent does not have partner (16 years)	0.182	0.184	0.181
Live with step-parent at age (16 years)	0.063	0.069	0.058
Female	0.496	0.000	1.000
Regional	0.340	0.335	0.344
Remote	0.016	0.016	0.015
Major City	0.645	0.649	0.640
Lives in Syd or Melbourne (16 years)	0.331	0.335	0.327
At least one sibling	0.941	0.942	0.941
Number of siblings	1.771	1.768	1.774
Is firstborn	0.437	0.439	0.435
Indigenous	0.017	0.018	0.015
Mother born overseas	0.224	0.225	0.223
Father born overseas	0.203	0.200	0.207
Child speaks LOTE at home (16 years)	0.091	0.088	0.094
Not studying at y18, lives in a major city (16 years)	0.297	0.331	0.262
Studying at y18, does not live in a major city (16 years)	0.138	0.133	0.143
Not studying at y18, does not live in a major city (16 years)	0.205	0.205	0.205
Studying at y18, lives in a major city (16 years)	0.360	0.330	0.391
Receives <median earnings (18 years)	0.320	0.259	0.382
Receives > median earnings (18 years)	0.299	0.346	0.251
No earnings (18 years)	0.380	0.394	0.366
Conflict in household (relation child vs parent, at 16 years)	0.204	0.207	0.202
No. observations	2,487	1,253	1,234



Source: Authors own calculations from Longitudinal Survey of Australia Children, wave 8.

(b) Leaving the parental home with or without support – HILDA

The HILDA survey is a panel dataset that has followed a large representative sample of Australian households and their occupants annually since 2001 (Watson and Wooden 2002). The initial sample of approximately 7,500 households represents around 13,000 responding individuals. Respondents in the initial survey are followed over time and individuals that join the original set of ‘HILDA households’ are also subsequently sampled on an annual basis. The empirical analysis in this paper uses information contained in waves 1 to 19.

The HILDA contains detailed information on the living arrangements and characteristics of household members. This includes detailed information on the payment of housing costs including rent and board, and the receipt of transfers from parents. Hence it is possible to identify if young adults remain coresident with parents and if so, take on responsibility for housing costs through the payment of board. The HILDA dataset follows individuals as they leave a household and form a new household over time. For those young adults who leave the parental household it is possible to identify if they continue to receive financial transfers from parents. This makes it possible to identify patterns of financial and housing independence as individuals transition into adulthood.

Descriptive evidence of patterns of housing outcomes among young adults are presented using survivor functions. Survivor functions are a useful analytical tool for understanding how individuals transition from one state (the ‘initial’ state) to another state. In our case, the initial state is defined as residing in the parental home and the exit state is living outside the parental home. The exit state could take a number of different forms including rental tenure or owner-occupation. In both circumstances, the transition may be made with or without financial assistance from parents. Survivor functions facilitate the analysis of whether such transitions differ by observable characteristics of individuals such as gender.

In this paper the sample consists of individuals who are first observed living with their parents and aged younger than 18. The youngest a respondent is observed is at age 16. The survivor functions are specified so as to capture the time between when the child is first observed in the data (age 16 years), and the first exit from the parental home. We denote this length of time as t . Formally the survivor function captures



the probability that an individual remains in the initial state (residing in the parental home from the age at which they are first observed) longer than time t^5 .

Survivor functions have a number of features which are particularly useful for understanding the processes of interest. First, the approach can readily take into account observations that are censored. This may occur in the case of longitudinal data where individuals are not interviewed in each wave, or where there is incomplete information on when an individual leaves the initial state as data collection ceases. Second, the initial and destination states can be defined in a flexible manner to gain greater insight into the processes of interest. For example, the initial state can be defined as residing in the parental home and contributing to housing costs through the payment of board. Alternatively, the destination state can be defined as residing outside the parental home with or without parental support. In this paper the initial state is defined as simply residing in the parental home, and the destination state ‘not residing in the parental home’.

The sample for the survivor analysis consists of all individuals aged between 16 and 26 years of age during the period 2001-19. That is, individuals aged 26 years and over are considered censored if they have not already exited from the parental household. Only the first exit from the parental home is modelled. Summary statistics for the sample used in the analysis are presented in Table 2 where each observation represents a person year during which young adults are at risk of leaving the parental household. In Panel A we present summary statistics of parental characteristics for those young adults aged less than 18 years of age. Of particular note is that in around eight percent of households, an individual within the household is identified by the parent as paying board. Panel B in Table 2 presents the characteristics of children in HILDA by age group. There is a clear pattern of increasing propensity to contribute to housing costs through the payment of board as children age. Panel C in Table 2 highlights how parental assistance with respect to housing is shaped by broader life-cycle considerations. Among those aged less than 22 years of age over half who coreside with parents report being a full-time student. Though lower among the older

⁵ The survivor function is defined as follows:

$$S_j = \prod_{k=1}^j \frac{n_k - d_k}{n_k}$$

Where d_j represents the number of failures or exits from the initial state in the j^{th} period. The number of individuals at risk of transitioning at the start of each period is equal to $n_j = N_j - m_j/2$ where m_j is the number of censored observations during the j^{th} period, and N_j is the number of individuals in the initial state at the start of the j^{th} period.



age group, it remains the case that those who are in full-time study are substantially more likely to report coresiding.

Table 2: HILDA sample

Panel A- Parental Characteristics at the time when child is aged less than 18						
	Mean	Std Dev				
Father age (years)	45.65	11.81				
Mother age (years)	42.56	15.16				
Father – uni. education	0.26	0.44				
Mother - uni. education	0.26	0.44				
HH gross income (\$'000s)	160.49	128.84				
Living in major urban area	0.57	0.50				
Outright owner	0.30	0.46				
Mortgaged owner	0.53	0.5				
% Public rent	0.03	0.17				
% Private renter	0.15	0.36				
Someone pays board in HH	0.08	0.28				
Number of observations	4,376					

Part B- Children Characteristics by Age Groups						
	Age <18		18<Age<22		22<Age<26	
	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev
Female	0.50	0.50	0.49	0.50	0.69	0.46
Non-dependent	0		0.02	0.13	0.32	0.46
Age of Child	16.57	0.78	19.68	1.15	24.37	1.40
Prop. FT students	0.92	0.27	0.53	0.50	0.20	0.40
Prop. FT workers	0.06	0.23	0.31	0.46	0.6	0.49
Prop. PT workers	0.49	0.50	0.51	0.50	0.28	0.45
Paying board	0.02	0.14	0.13	0.33	0.15	0.35
Rec. money from parent			0.29	0.46	0.13	0.34
Intent. to move w/in 3 yrs	0.12	0.32	0.22	0.41	0.31	0.46
Plan to move outside town	0.86	0.35	0.86	0.35	0.91	0.29
Born before 1991	0.33	0.47	0.39	0.49	0.57	0.50
Have Partner			0.02	0.15	0.21	0.40
Number of Observations	4,376		2,808		1,779	

Part C- Children Characteristics by Age Groups								
	18<Age<22				22<Age<26			
	Living Apart		Coresiding		Living Apart		Coresiding	
	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev
Age of child	20.11	1.07	19.67	1.15	25.51	0.80	23.82	1.24
Prop. FT students	0.21	0.41	0.54	0.50	0.12	0.33	0.24	0.43
Prop. FT workers	0.42	0.49	0.30	0.46	0.65	0.48	0.58	0.49
Prop. PT workers	0.28	0.45	0.51	0.50	0.20	0.40	0.32	0.47
Have partner	0.67	0.47	0.01	0.10	0.66	0.50	0.02	0.13
Number of observations	118		2,768		1,043		1,116	

Source: Authors own calculations from Household Labour Income Dynamics in Australia, waves 1-19.



4. LSAC Analysis

The results obtained with the LSAC, focusing on young adults aged 18 to 19 years, are presented in Table 3 and Table 4⁶. Table 3 presents results from a specification in which two possible outcomes are considered, namely coresiding in the parental home or living away from the parental home at age 18. Table 4 presents the results from a specification in which four possible outcomes are considered, where we distinguish between living in the parental home without or with contributions made towards housing costs, and, living outside of the home with or without financial support for accommodation from parents. The coefficients reported in Table 3 and Table 4 represent average marginal effects from the multinomial logit specification. For any given coefficient the marginal effects across all possible outcomes sum to zero, with a positive value indicating that the covariate is associated with a greater likelihood that the particular outcome is observed.

The results presented in Table 3 suggest a weak relationship between SES and whether young Australians coreside with parents. Parental income is captured using a series of indicator variables for different income categories, when the child was aged 16 years, with parental income greater than \$3000 per week as the reference category. The results are largely statistically insignificant other than for the lowest category of income. The likelihood of residing in the parental home is lower by about 6 percentage points for young people whose parental income is in the lowest category (less than \$500 per week) relative to the reference group. It is nonetheless the case that as parental income measured at age 16 declines the coefficients become larger in magnitude suggesting that the young adult is more likely to live outside of the parental home. Such a pattern would be consistent with the findings reported in Cobb-Clark and Gørgens (2014) that high SES households provide more in-kind support to their children through coresidence. In comparison, the education variables suggest that lower levels of education reported by parents is associated with a higher probability that the young adult coresides in the parental home. It is notable that even at this relatively young age, there is evidence that being female is associated with a lower likelihood that the young adult coresides with their parents.

The tenure status of parents and location are likely to be important determinants of the cost of supporting children through coresidence. The cost will in general be lower if the parental dwelling is owner-occupied.

⁶ Note that respondents are aged 18 or 19 years of age at the time of interview in wave 8. Throughout the remaining of the paper individuals will simply be referred to as being '18 years'.



Coresidence is also an attractive option to provide in-kind support to children in high priced housing markets. From the child's perspective, the attractiveness of establishing an independent household will be strongly influenced by the cost of housing. While the results in Table 3 suggest a negative association between parental homeownership and the young adult leaving the parental household, the coefficient is small and not statistically significant. Young adults living in high priced markets such as Sydney and Melbourne are significantly more likely to remain coresiding with parents at age 18. There is also evidence that for the child, having high income (greater than the median) is associated with a lower probability of remaining in the parental household. Consider now the relationship between studying and location. Young adults who are studying (at age 18) and not living in a major city (at age 16) are significantly less likely to remain coresiding with parents (by 13 percentage points) compared to those studying (at age 18) and living in a major city (at age 16). More generally these results highlight the importance of location and education activities. Those not living in a major city at age 16 are more likely to leave the parental home, and this is stronger for those studying than for those not studying.

Existing evidence suggests that the decision to leave the parental home will also be driven by personal relationships within the household. There is clear evidence of this in the results reported in Table 3 with the presence of a step-parent at age 16 and conflict between the child and parent (measured at age 16) associated with significantly greater probability that the child moves out of the parental house by age 18.

In Table 4 we present results from a specification in which four possible outcomes at age 18 are considered by incorporating information on whether young adults contribute to the cost of housing while coresiding (pay board or not), or if living separately from parents receive transfers to assist with housing costs. This richer specification allows for a more nuanced understanding of the housing outcomes experienced by young adults.

Compared to Table 3, we see evidence of an SES gradient across housing outcomes. For example, as parental income measured at age 16 increases the young adult is significantly more likely to coreside in the parental home and not contribute to housing costs (column (1)). This is largely offset by a reduced likelihood of coresiding and paying board (column (2)). The marginal effects reported in Table 4 are relatively large. Those in the highest income class (\$3000+ per week) are 11 to 18 percentage points more likely to coreside without paying board, and about 12 percentage points less likely to coreside and pay board compared to those with low to medium parental income (\$500-\$1,999 per week). These results are consistent with a pattern whereby housing is provided by high SES parents as an in-kind transfer, with



lower income parents more likely to require children to contribute to housing costs through the payment of board or rent (column (2)). The estimates also reveal a somewhat nuanced pattern. Having lower parental income is associated with a higher likelihood of paying board when living with the parents, but also a higher likelihood of not having accommodation support once children have moved out. In particular, in column (4) we observe that for those young adults whose parents have low-to-medium incomes (\$500-\$1,999 per week), there is a higher probability that no accommodation support is available once they have moved out of the parental residence.

Table 3: Multinomial Logit Estimates: Coresiding vs Not Coresiding

	Coresiding		Not coresiding	
	Coeff.	Std. Error	Coeff.	Std. Error
Combined parental income <\$500/wk (16 yrs)	-0.056***	(0.33)	0.056*	(0.033)
Combined parental income \$500-\$999/wk (16 yrs)	-0.038	(0.027)	0.038	(0.027)
Combined parental income \$1000-\$1999/wk (16 yrs)	-0.015	(0.021)	0.015	(0.021)
Combined parental income \$2000-\$2999/wk (16 yrs)	-0.011	(0.019)	0.011	(0.019)
Parent ed. level - High School Only (16 years)	0.049*	(0.026)	-0.049*	(0.026)
Parent ed. level - Cert/Diploma (16 years)	0.019	(0.014)	-0.019	(0.014)
Parents do not own home (16 years)	-0.003	(0.019)	0.003	(0.019)
Home is crowded (>1.5 people per bedroom, 16 yrs)	-0.007	(0.028)	0.007	(0.028)
Main parent does not have partner (16 yrs)	-0.052**	(0.021)	0.052**	(0.021)
Live with step-parent at age (16 yrs)	-0.066***	(0.023)	0.066***	(0.023)
Female	-0.034**	(0.014)	0.034**	(0.014)
At least one sibling	0.028	(0.032)	-0.028	(0.032)
Number of siblings	-0.007	(0.006)	0.007	(0.006)
Is firstborn	-0.006	(0.015)	0.006	(0.015)
Indigenous	0.023	(0.051)	-0.023	(0.051)
Mother born overseas	-0.049***	(0.018)	0.049***	(0.018)
Father born overseas	-0.01	(0.022)	0.010	(0.022)
Child speaks LOTE at home (16 years)	0.032	(0.035)	-0.032	(0.035)
Live Sydney/ Melbourne (age 16)	0.065***	(0.004)	-0.065***	(0.004)
Not studying at y18, lives in a major city (16 yrs)	0.01	(0.022)	-0.010	(0.022)
Studying at y18, does not live in a major city (16 yrs)	-0.130***	(0.024)	0.130***	(0.024)
Not studying at y18, does not live in a major city (16 yrs)	-0.061**	(0.024)	0.061***	(0.024)
Receives <median earnings (18 yrs)	0.005	(0.019)	-0.005	(0.019)
Receives > median earnings (18 yrs)	-0.066***	(0.017)	0.066***	(0.017)
Conflict in household (relation child vs parent, at 16 yrs)	-0.046***	(0.017)	0.046***	(0.017)
Pseudo R ²			0.1275	
Number of observations			2,487	

Notes: Average marginal effects reported. Reference group has following characteristics: parental income >\$3000/week; parents have bachelor degree or more; main parent is partnered; parents are owner-occupiers when child is 16 years; non indigenous; live in a non-crowded house; male child, without siblings, is currently not earning income, is studying and lived in a major city at age 16.



As noted one important aspect of parental resources which may shape the support provided to and housing outcomes of adult children is homeownership. Results reported in Table 4 indicates that where parents are not in owner-occupied housing (at age 16), there is a significantly higher likelihood of residing in the parental home and contributing to housing costs. Coupled with this is a higher probability that adult child moves out and do not receive financial support (column 4). Taken together the results associated with the income, education and homeownership variables provide additional insight compared to previous studies. For example, Cobb Clark and Ribar (2012) find no evidence that the residential decisions of young Australians are related to the economic situation of parents, other than homeownership. The coefficients on the homeownership variable likely reflect both price and wealth impacts. The higher wealth of homeowners correlates with higher in-kind support to adult children in the form of coresidence. Further, support in the form of coresidence is relatively cheaper for homeowners to provide to their adult children. Existing evidence indicates that home-owning households tend to be wealthier on average, and this higher wealth is correlated with support for adult children through in-kind transfers (column (1)) or support for living outside the parental home (column (3)) (Cobb-Clark and Ribar 2012).

In terms of gender recall that the results reported in Table 3 indicated that women were more likely to have moved out of the parental home. The results in Table 4 provide additional detail on the gender gap in the housing experiences of young adults. Women are more likely to coreside and not pay board (column (1)), less likely to coreside and pay board (column (2)), and more likely to move out and not receive financial support (column (4)). This is consistent with a pattern whereby women are more likely to receive in-kind support if they remain at home, but do not get housing-related financial support if they exit the parental household. Differences across gender in the magnitude and nature of support offered to adult children by parents has been identified in previous studies such as Whittington and Peters (1996) and some European studies (Angelini and Laferrère 2013).

In line with the results in Table 3, there is strong evidence that housing outcomes are associated with location and education patterns. First, young adults living in a major city (at age 16) and not studying at age 18 are more likely to be coresiding and paying board (column (2)), whereas they are less likely to move out with accommodation support (column (3)), compared to those who are studying at age 18 and lived in a major city (at age 16) (reference category). Second, studying at age 18 and not living in a major city (at age 16) strongly lowers the probability of residing in the parental home without paying board (column (2)) and increases the probability of not coresiding (both with and without support for housing expenses; columns (3) and (4)), compared to the reference category. These outcomes are consistent with individuals



receiving housing support to undertake study, especially where it requires relocation to a major urban centre. Results around studying highlight the importance of identifying the broader context associated with housing outcomes and the role of parental support in shaping long term life-cycle behaviours. In a similar fashion, the labour market activities of the adult child are also an important predictor of housing outcomes. Notably, young adults who report earnings are significantly more likely to report contributing to housing costs via the payment of board if coresident. This is particularly pronounced where earnings exceed the median, a characteristic associated with a significantly higher likelihood that the young adult has established full housing independence by living outside the parental home and not receiving transfers from parents (column 4). Household relationships continue to be important for understanding housing outcomes, with the presence of a step-parent at age 16 and child-parent conflict associated with a greater likelihood that the young adult no longer coresides in the parental home.



Table 4: Multinomial Logit Estimates, four-outcome models

	Coresiding, no board (1)	Coresiding, paying board (2)	No cores, accom. supp/ no rent (3)	No cores., no accom. support (4)
Combined parental income <\$500/wk (16 years)	-0.183*** (0.049)	0.122*** (0.044)	0.037* (0.020)	0.024 (0.028)
Combined parental income \$500-\$999/wk (16 years)	-0.157*** (0.036)	0.119*** (0.033)	0.003 (0.021)	0.034* (0.021)
Combined parental income \$1000-\$1999/wk (16 years)	-0.105*** (0.027)	0.093*** (0.025)	-0.022 (0.013)	0.034* (0.018)
Combined parental income \$2000-\$2999/wk (16 years)	-0.040 (0.026)	0.027 (0.025)	0.001 (0.012)	0.012 (0.016)
Parent ed. level - High School Only (16 years)	0.009 (0.034)	0.044 (0.029)	-0.031* (0.019)	-0.022 (0.020)
Parent ed. level - Cert/Diploma (16 years)	-0.005 (0.020)	0.024 (0.019)	-0.014 (0.009)	-0.005 (0.012)
Parents do not own home (16 years)	-0.068*** (0.024)	0.068*** (0.020)	-0.025* (0.015)	0.025* (0.013)
Home is crowded (>1.5 people per bedroom, 16 years)	-0.002 (0.036)	0.002 (0.032)	-0.013 (0.020)	0.014 (0.020)
Main parent does not have partner (16 years)	-0.075*** (0.028)	0.020 (0.024)	0.026* (0.015)	0.029* (0.016)
Live with step-parent at age (16 years)	-0.098*** (0.034)	0.031 (0.031)	0.024 (0.015)	0.044*** (0.017)
Female	0.037** (0.019)	-0.071*** (0.017)	0.008 (0.009)	0.026** (0.011)
At least one sibling	0.065 (0.042)	-0.041 (0.039)	-0.006 (0.017)	-0.019 (0.027)
Number of siblings	-0.015 (0.010)	0.009 (0.009)	0.001 (0.004)	0.005 (0.005)



Table 4 - continued

Is firstborn	0.018 (0.021)	-0.022 (0.019)	0.009 (0.010)	-0.004 (0.013)
Indigenous	-0.014 (0.070)	0.036 (0.056)	0.016 (0.030)	-0.038 (0.040)
Mother born overseas	-0.016 (0.026)	-0.029 (0.024)	0.037*** (0.011)	0.008 (0.017)
Father born overseas	0.029 (0.028)	-0.041 (0.027)	0.000 (0.014)	0.012 (0.018)
Child speaks LOTE at home (16 years)	0.048 (0.042)	-0.025 (0.042)	-0.008 (0.021)	-0.015 (0.031)
Live Sydney/ Melbourne (age 16)	0.142*** (0.025)	-0.084*** (0.023)	-0.043*** (0.016)	-0.015 (0.018)
Not studying at age 18, lives in a major city (16 years)	-0.042 (0.027)	0.060** (0.024)	-0.031*** (0.015)	0.014 (0.019)
Studying at age 18, does not live in a major city (16 years)	-0.166*** (0.032)	0.043 (0.030)	0.063*** (0.012)	0.060** (0.023)
Not studying at age 18, does not live in a major city (16 years)	-0.050 (0.031)	-0.005 (0.029)	-0.002 (0.014)	0.057** (0.022)
Receives <median earnings (18 years)	-0.059** (0.025)	0.069*** (0.023)	-0.007 (0.011)	-0.003 (0.019)
Receives > median earnings (18 years)	-0.218*** (0.021)	0.154*** (0.020)	0.009 (0.012)	0.055*** (0.013)
Conflict in household (relation child vs parent, at 16 years)	-0.062*** (0.022)	0.016 (0.019)	0.030*** (0.010)	0.015 (0.013)
Pseudo R ²			0.1714	
Number of observations			2,487	

Notes: see table 3.



Gender differences

Separate analyses undertaken for men and women reveal some heterogeneity in the predictors of housing independence outcomes⁷. For men the relationship between housing outcomes and parental income is relatively flat. Compared to individuals whose parents have income exceeding \$3000 per week, at medium to high parental incomes (\$1000-\$3000 per week) there is evidence of a lower probability of coresiding without paying board offset by a higher probability of coresiding and paying board. Earnings above the median for the young adult men is associated with a significantly lower probability of coresiding and not paying board (in the order of 26 percentage points), offset by a higher probability that the individual contributes to housing costs by paying board to parents when residing at home or living outside the parental home without financial support from parents.

For women there appears to be a much clearer SES gradient based on parental income in the probability of in-kind and direct transfers associated with housing. As parental income increases there is a lower (higher) likelihood that women remain coresident with parents and pay (not pay) board. Further, for women the probability of living outside the parental home and not receiving financial transfers falls as parental income increases. Like men, above median earnings for young women are associated with a higher probability that the individual takes some responsibility for housing costs either by paying board to parents when residing at home, or by living independently. Residing with a step-parent reduces the probability that the young adult resides in the parental home, though the effect is only significant for men. A similar pattern emerges in the presence of parent-child conflict at age 16. Similarly, having a single parent strongly reduces the likelihood of coresiding and not paying board for young men. This is compensated by a higher likelihood of being in one of the other housing categories, especially coresidence coupled with the payment of board or living outside the parental home and not receiving support. Interestingly, absence of a partner for the parent is unrelated to housing outcomes among women at age 18 or 19.

Predicted housing outcomes

To provide additional insight into the patterns discussed above we use the results from the multi-nomial estimates to highlight differences in predicted outcomes for individuals with particular characteristics.

⁷ Full results for women and men are available on request.



Results are reported separately for men (Panel A) and women (Panel B) in Table 5 . A series of stylised individuals are used to highlight how outcomes differ across SES status, education, geography and gender. In the case of a high SES status men, for example, the individual is assumed to have parents with income greater than \$3,000 per week and a university education. The remaining characteristics are set equal to the means of all other variables in that group and the coefficients from the specification for men used to calculate predicted probabilities for each of the housing related outcomes. Low SES instead is captured by parents with low income (less than \$1000 per week) and high school education, and average other characteristics within this group.

The results reported in Table 5 indicate that low SES individuals are substantially less likely to reside in the parental home and not pay board compared to high SES individuals (by 30 percentage points for women and 25 percentage points for men). For men, this is offset by a substantially greater likelihood to be residing in the parental home and paying board (the SES gap is 25 percentage points). The lower likelihood among lower SES young women of coresiding without paying board is offset by a higher likelihood of coresiding and paying board or living outside the parental home and not receiving accommodation support (the SES gap is 32 percentage points). Such a pattern may reflect in part a greater propensity for young women to leave the parental home following partnering even at a relatively young age. Studying in a major city is associated with a substantially higher propensity to be coresiding and not paying board relative to other housing outcomes, among both men and women (89 and 92 percent, respectively). There is some gender difference among those who are not studying. For men, this is associated with a greater likelihood that the individual coresides and contributes to housing costs through the payment of board, relative to women (among those living in a major city, the gender gap is 13 percentage points). In comparison, among women there is a greater likelihood of moving from the parental home, establishing greater housing independence and not receiving accommodation support from parents (among those living in a major city, the gender gap is 3 percentage points; among those not living in a major city, the gender gap is 6 percentage points).



Table 5: Predicted probabilities of housing outcomes across selected dimensions

	Coresiding, no board (1)	Coresiding, paying board (2)	No cores, accom. supp/ no rent (3)	No cores., no accom. support (4)
Panel A: Men				
<i>Data mean</i>	0.712	0.179	0.049	0.060
<i>Low SES</i>	0.630	0.324	0.024	0.022
<i>High SES</i>	0.879	0.067	0.041	0.013
<i>Studying, in major city</i>	0.893	0.074	0.023	0.009
<i>Studying, not in major city</i>	0.534	0.264	0.130	0.072
<i>Not studying, in major city</i>	0.741	0.222	0.016	0.021
<i>Not studying, not in major city</i>	0.640	0.237	0.047	0.076
Panel B: Women				
<i>Data mean</i>	0.749	0.112	0.064	0.075
<i>Low SES</i>	0.588	0.271	0.034	0.107
<i>High SES</i>	0.912	0.043	0.028	0.018
<i>Studying, in major city</i>	0.916	0.042	0.023	0.019
<i>Studying, not in major city</i>	0.608	0.116	0.194	0.082
<i>Not studying, in major city</i>	0.840	0.092	0.015	0.053
<i>Not studying, not in major city</i>	0.685	0.147	0.037	0.131

5. HILDA Analysis

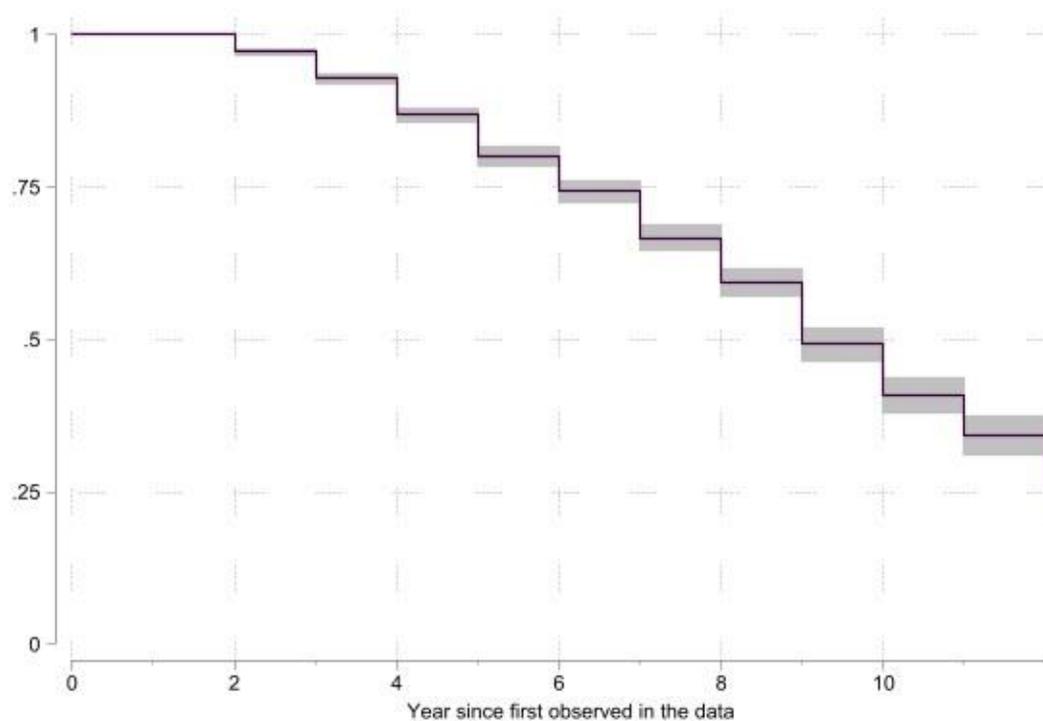
We now consider housing outcomes using the HILDA data and focus on the years following the completion of secondary and tertiary education. Our interest in examining the HILDA data is to identify the extent to which younger Australians remain reliant on housing provided by parents through continued coresidency. The survivor functions presented below capture the time at which individuals first leave the parental home. The LSAC data revealed that at age 18 or 19 years, approximately 11.4 percent of young adults reported residing outside the parental home. Although there is evidence that it has become increasingly likely that children return to the parental home once they have moved out, the survivor functions presented below will not capture this behaviour.

In Figure 1 we present the survivor function for the entire sample, indicating the proportion of individuals who remain in the parental household from age 16. Note that the survivor function is non-increasing as in any given period individuals at risk of leaving the initial state may do so. By age 25 the survivor function takes a value of approximately 0.50, indicating that approximately 50 per cent of the population at risk has exited the initial state, that is they have left the parental home for the first time. Recall that there is



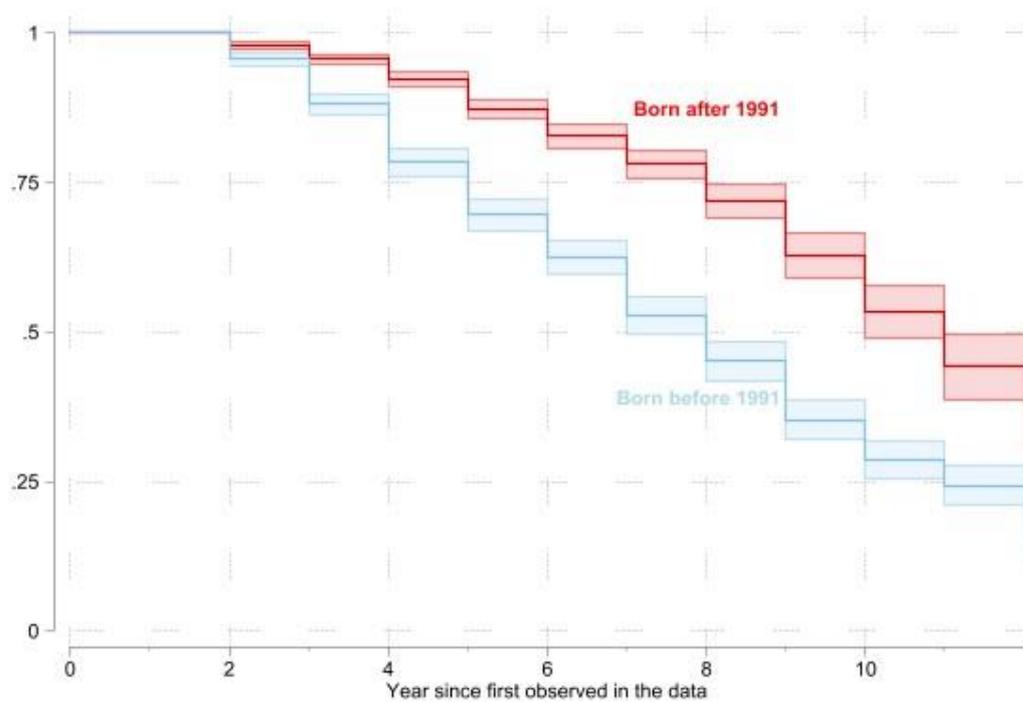
Australian and international evidence that patterns of housing independence are evolving over time with children remaining in the parental home longer than they have done so in the past. This pattern is highlighted in Figure 2 which depicts survivor functions for HILDA respondents born prior to and after 1991. Those born after 1991 will first enter the 'at risk' sample in 2007 when aged 16 years. Figure 2 clearly highlights the slower exit from the parental home exhibited by the younger cohort. By age 25, approximately 65 percent of the young cohort are yet to have exited the parental home compared to approximately 40 percent among the older cohort.

Figure 1: Transition from Parental Households: Kaplan-Meier survival estimates



Notes: Authors own calculations using waves 1-19 HILDA. 95 percent confidence intervals shown as shaded.

Figure 2: Transition from parental household, by year of birth: Kaplan-Meier survival estimates



Notes: Authors own calculations using waves 1-19 HILDA. 95 percent confidence intervals shown as shaded.

In Figure 3 we present a series of survivor functions that highlight patterns of exit from the parental household differentiated by the observable characteristics of individuals. A number of stylised patterns can be observed. First, the survivor function for women consistently lies below that for men, indicating that women are more likely to exit the parental home at any given age (Figure 3a). Such a pattern is consistent with that observed in the LSAC data which indicated that women are more likely to have moved out of the parental home by age 18, and are more likely to have done so with parental financial support for accommodation expenses. This pattern is similar to those observed in the United States (Matsudaira 2016) and Europe (Angelini and Laferrère 2013). Such a pattern may reflect a range of considerations. While differences in age of marriage or partnering may be important, analysis of behaviours in Europe for example suggested that women departing the parental household earlier was consistent with high income parents behaving altruistically and facilitating their daughters establishment of an independent household. Nonetheless, the evidence from LSAC does not suggest that transitioning out of the parental home at age 18 among females is coupled with transfers from parents.

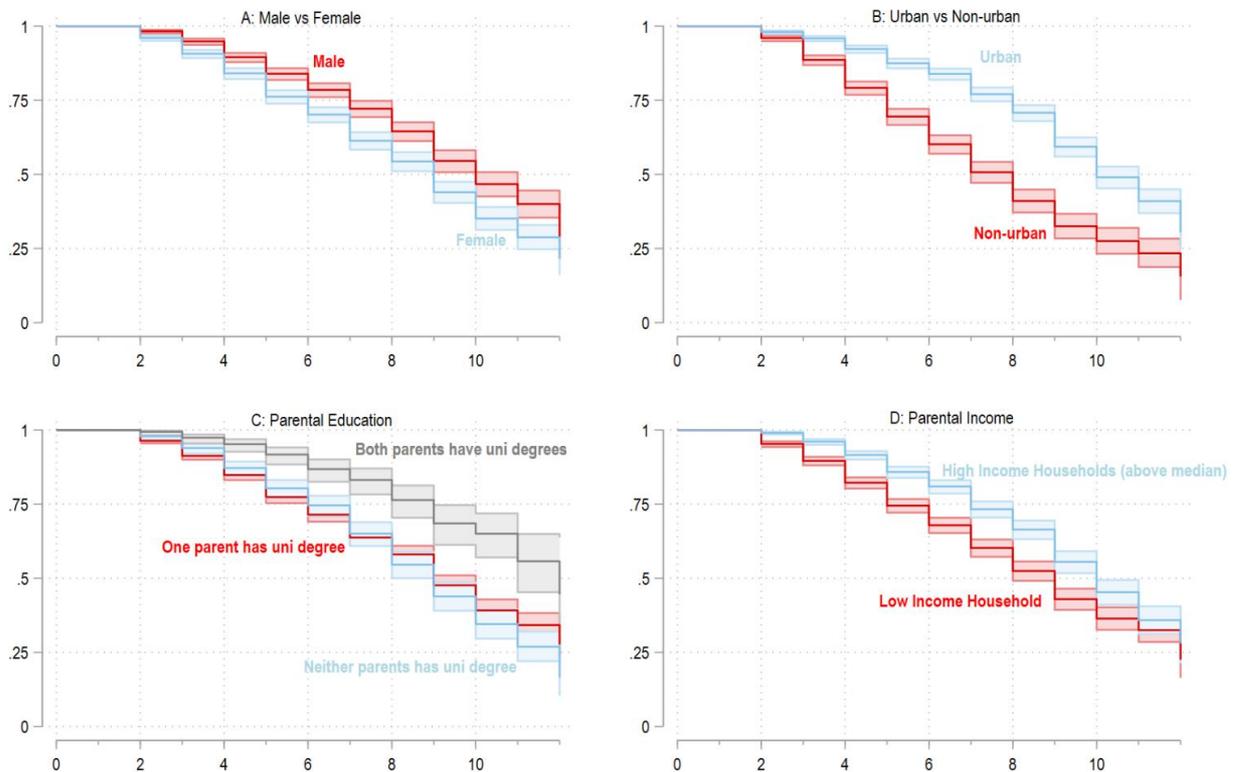
Figure 3b highlights differences in urban and non-urban areas with young adults in the latter substantially more likely to leave the parental home at younger ages. This pattern is also highlighted in the analysis of



the LSAC and likely reflects the more limited education opportunities available for those who reside in non-urban areas after the completion of secondary school, along with the cost of housing (Angelini and Laferrère 2013). Consistent with residing in the parental home while undertaking post-secondary schooling, the survivor functions converge for individuals by around age 25.

Figure 3c and 3d focus on the resources of the parents and the relationship between those resources and the likelihood that adult children depart the parental household. These highlight a clear socio-economic gradient in the behaviour of young adults with respect to their housing outcomes. Where one or both parents have a university degree or more, the survivor functions indicate that children are far less likely to exit the parental home (Figure 3c). This highlights the benefit of the longer panel provided by HILDA. The analysis of LSAC provided limited insight into the relationship between parental education and the housing outcomes of adult children as they completed high school. Figure 3c indicates that by age 25, around 65 per cent of children whose parents are both university educated are yet to leave the parental home. In contrast, where neither parent has a university degree more than 50 percent of adult children have exited the parental home by this age. Similarly, Figure 3d shows a pattern consistent with the findings from the LSAC and highlights the likelihood that the children of high income parents continue to receive parental support in the form of co-residence over time (Table 4). Notably, the survivor function indicates that the difference between the support offered to children with high- and low-income parents initially grows and then falls as children age. Such an outcome is most likely associated with continued support through co-residence while undertaking higher education and would suggest that housing plays an important role in providing support over time facilitating the accumulation of human capital.

Figure 3 – Survivor function by observable characteristics.



6. Conclusion

There is increasing evidence that the transition to adulthood has become more complex and protracted. A critical aspect of that transition is the housing experiences of young Australians as they complete secondary education, and, continue their education or enter full-time work. Those housing outcomes are critical not simply for the welfare during that transition into adulthood, but also play an important role in facilitating outcomes over the lifecycle. In this paper we have examined the nature of housing outcomes experienced by young Australians and the critical role played by parents in supporting those outcomes through in-kind support and direct transfers.

The analysis adds to the evidence base around the development of financial independence and financial autonomy, and, the role of housing in the transition into adulthood. Housing outcomes and experiences play an important role facilitating and supporting that transition. Recent evidence points to a pattern whereby younger Australians are increasingly remaining in or returning to the parental household. This represents an important in-kind transfer that has the potential to provide opportunities to accumulate



human capital or savings. Nonetheless, the analysis in this paper suggests disparities, as some young adults contribute to housing costs while remaining in the parental home, while others continue to receive support after leaving the parental home. A better understanding of the determinants and consequences of the housing experiences of younger Australians is valuable for developing policy and targeting public assistance.

Our analysis leads to a number of conclusions. First, as the existing literature highlights, financial independence or autonomy is not dichotomous, especially in the housing domain. Rather, there is a continuum of experiences and housing outcomes shaped by economic considerations around the cost of housing, and its role in supporting other activities such as education and employment. Importantly, there is clear evidence that housing provides opportunities for parents to provide transfers to adult children in a flexible manner. There is also evidence that housing independence is being achieved later in life, with exit from the parental home being delayed relative to earlier cohorts. Further, there is evidence of SES and gender disparities on housing outcomes. Young Australians whose parents are high SES are more likely to coreside with their parents and receive full housing support compared to those whose parents are low SES. This disparity is large and more pronounced for women, for whom the SES gap is 30 percentage points, than for men, for whom the SES gap is 25 percentage. By contrast, those whose parents are low SES are more likely coreside and contribute to housing expenses, by 25 percentage points, than their high SES counterparts. Low SES young women more likely to have left the parental home and not receive any accommodation support compared to high SES young women (11 versus 2 percentage points, respectively). One consequence of these SES gaps is that, while gaining responsibility for household expenses and attaining housing autonomy earlier, low SES young Australians may be less likely to accumulate savings. Moreover, receiving housing support from parents provides a valuable opportunity for young adults to focus on their studies and accumulate human capital which will enhance their outcomes over the lifecycle. Over time, SES disparities in housing outcomes of young Australians may exacerbate inequality of opportunity and outcomes. Our analysis also points to clear regional patterns in housing outcomes that likely reflect economic factors such as the price of housing, but also broader opportunities around education.

The analysis in this paper is descriptive, identifying patterns of housing experiences and key correlates of those outcomes. Future research would ideally consider how those outcomes during the transition into adulthood shape long term outcomes around education, employment and the attainment of homeownership.



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