ECONSTOR
Make Your Publications Visible.

A Service of
ZBW
Leibniz-Informationszentrum Wirtschaft
Leibniz Information Centre for Economics

Cobb-Clark, Deborah A.; Ribar, David C.

Working Paper

Financial stress, family conflict, and youths' successful transition to adult roles

IZA Discussion Papers, No. 4618

Provided in Cooperation with:
IZA – Institute of Labor Economics

Suggested Citation: Cobb-Clark, Deborah A.; Ribar, David C. (2009) : Financial stress, family conflict, and youths' successful transition to adult roles, IZA Discussion Papers, No. 4618, Institute for the Study of Labor (IZA), Bonn

This Version is available at:
https://hdl.handle.net/10419/35924

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

WWW.ECONSTOR.EU

Mitglied der Leibniz-Gemeinschaft

DISCUSSION PAPER SERIES

IZA DP No. 4618

Financial Stress, Family Conflict, and Youths' Successful Transition to Adult Roles

Deborah A. Cobb-Clark
David C. Ribar

December 2009

Forschungsinstitut
zur Zukunft der Arbeit
Institute for the Study
of Labor

Financial Stress, Family Conflict, and Youths' Successful Transition to Adult Roles

Deborah A. Cobb-Clark
RSSS, Australian National University
and IZA

David C. Ribar
University of North Carolina at Greensboro
and IZA

Discussion Paper No. 4618
December 2009

IZA

P.O. Box 7240
53072 Bonn
Germany

Phone: +49-228-3894-0
Fax: +49-228-3894-180
E-mail: iza@iza.org

Any opinions expressed here are those of the author(s) and not those of IZA. Research published in this series may include views on policy, but the institute itself takes no institutional policy positions.

The Institute for the Study of Labor (IZA) in Bonn is a local and virtual international research center and a place of communication between science, politics and business. IZA is an independent nonprofit organization supported by Deutsche Post Foundation. The center is associated with the University of Bonn and offers a stimulating research environment through its international network, workshops and conferences, data service, project support, research visits and doctoral program. IZA engages in (i) original and internationally competitive research in all fields of labor economics, (ii) development of policy concepts, and (iii) dissemination of research results and concepts to the interested public.

IZA Discussion Papers often represent preliminary work and are circulated to encourage discussion. Citation of such a paper should account for its provisional character. A revised version may be available directly from the author.

IZA Discussion Paper No. 4618
December 2009

ABSTRACT

Financial Stress, Family Conflict, and Youths' Successful Transition to Adult Roles*

We analyze the effect of mothers' and youths' reports of family financial stress and conflict on youths' transitions into adult roles. We find that mothers' reports of financial stresses and borrowing constraints are associated with earlier transitions to inactivity and public assistance, while youth reports of financial stresses are associated with earlier nest-leaving. Youths reporting conflict with parents leave school and move out earlier than their peers, while conflict between parents is associated with youth making later transitions. Overall, financial stress and conflict have independent effects on youths' transitions and youths' perspectives have different consequences to those of their mothers.

JEL Classification: D13, J13

Keywords: youths, financial stress, family conflict

Corresponding author:

Deborah A. Cobb-Clark
Economics Program
Research School of Social Sciences
Coombs Bldg. 9
Australian National University
Canberra 0200
Australia
E-mail: deborah.cobb-clark@anu.edu.au

* This paper uses confidentialized unit record file data from the Household, Income and Labour Dynamics in Australia (HILDA) survey. The HILDA Project was initiated and is funded by the Department of Families, Housing, Community Services, and Indigenous Affairs (FaHCSIA) and is managed by the Melbourne Institute of Applied Economic and Social Research (MIAESR). The findings and views reported in this paper, however, are those of the authors and should not be attributed to FaHCSIA or MIAESR.

1. **Introduction**

Young people in many countries are prolonging the period that they are financially dependent upon their parents (see for example, Hartley 1993; Whittington and Peters 1996; Schneider 1999; Weston et al. 2001). Increasingly, parents are called upon to provide direct monetary transfers or co-residential support (i.e. food and shelter) to their adolescent or young-adult offspring in order to assist them in completing their schooling, beginning their careers, acquiring housing, and establishing families of their own. Families are not all equally well positioned to provide this support, however. The financial stress and family conflict that often accompany economic disadvantage may result in young people not receiving the financial or emotional support they need in negotiating their transition to more adult roles. If so, the family's inability to provide support to its young-adult members may represent one important mechanism through which socio-economic disadvantage is perpetuated across the generations.

In particular, there is a vast literature documenting the adverse cognitive, behavioral, emotional, and physical consequences of growing up in poverty (see Haveman and Wolfe 1995; Duncan and Brooks-Gunn 1997). Psychologists, in particular, argue that family economic hardship affects youths' outcomes by creating perceptions of economic pressure, weakening family relationships, and disrupting positive parenting practices (see Conger et al. 2002; Mistry et al. 2009). Many parents protect their children from the most negative effects of economic hardship by bearing a disproportionate share of any cutbacks or by adopting supportive parenting strategies (Clark-Lempers et al. 1990; McLoyd and Wilson, 1990; Conger et al. 1997; Conger et al. 2002; Mistry et al. 2009). As a result, adolescents' perceptions of financial stress are often distinct to those of their parents (Clark-Lempers et al. 1990; Conger et al. 2002) and variation in the way that objective economic conditions are perceived is important in understanding

differences in subsequent outcomes (see Lempers and Clark-Lempers 1997). Despite this, youths' perspectives are often ignored in models of economic hardship and subsequent wellbeing (Mistry et al. 2009).

Our objective is to fill a void in the literature by analyzing the effect of family financial stress and conflict on youths' transitions out of school, into economic inactivity, onto public assistance, and out of their parent's homes. Unlike the previous literature, we directly account for young people's perceptions of both financial stress and family conflict separately from those of their parents. Specifically, we estimate hazard models of a series of youth transitions using nationally-representative, longitudinal data for adolescents (aged 16 – 21) and their families captured in the Household, Income and Labour Dynamics in Australia (HILDA) survey. These HILDA data have several strengths that make them invaluable for the analysis at hand. First, the survey obtains detailed socio-economic, psychological, and demographic information, including reports of financial stress and personal conflicts, directly from each household member aged 15 and over. This allows us to account separately for the role of economic resources (in particular, household income and the receipt of public transfers) as well as parents' and youths' perceptions of financial difficulty and family conflict in adolescents' transitions into a wide range of adult roles. Second, the HILDA panel is nationally representative and follows respondents as they move out of their parents' homes to establish households of their own. This ability to match a representative sample of adolescents and young adults to the households in which they grew up allows us to move beyond the selective, cross-sectional data samples that characterize much of the psychological research in this area. Finally, the Australian context itself is of considerable interest as government policy has increasingly shifted the financial burden of supporting young adults from the public purse to their families. Most young Australians under the age of 25 now

qualify for social assistance on the basis of their parents' (rather than their own) incomes (Maas 1990; Smyth 2000). As a result, many young Australians rely heavily on their parents' assistance, in particular co-residential support, while they pursue their post-secondary educations.

Understanding the way that economic disadvantage, financial stress, and family conflict affect youths' transitions into adult roles is important for a number of reasons. First, these transitions are likely to be inter-related implying that less than successful transitions in one dimension may have consequences for the ability to assume adult roles more generally. Leaving the family "nest" early, for example, may be associated with early school leaving, economic inactivity and an inability to make labor market investments. Second, difficult transitions are likely to be incredibly consequential. Not only might adolescents and young adults fare badly during this transitional period, but a lack of education, little work experience, or an early press of family demands may also diminish their future economic prospects. Third, low income and financial stress are not synonymous. The incidence of financial hardship declines rapidly as household income increases, however, cash-flow problems also affect many middle- and upper-income families (Bray 2001; Breunig and Cobb-Clark 2005). Financial stress is typically concentrated in households with children and there is evidence that children have a larger effect on measures of financial stress than on measures of income or subjective poverty (Marks 2007).[1] Finally, designing policies to support young people requires a firm understanding of the ways in which growing up in disadvantage constrains their future opportunities. If, for example, a

[1] In Australia, one third of those living in households experiencing multiple financial stresses are children under the age of 15 (Bary 2001). The lack of a common scale for financial stresses makes international comparisons difficult. Guio (2005) examined four measures of "economic strains" in European countries and found that the percentage of households experiencing multiple deprivations ranged from five percent of less in Denmark, Luxembourg, and the Netherlands to 50 percent in Portugal. As with Australia, Guio found that the deprivations were generally higher in European households with children.

youth's transition to an adult role is limited by his or her perceptions of family financial stress and conflict, rather than by economic disadvantage per se, public policies that direct additional resources to families may only indirectly affect his or her life chances.

Consistent with previous studies, our empirical analyses indicate that standard measures of economic resources and capabilities, such as higher household incomes, home ownership, and higher parental occupational attainments, are associated with "better" youth outcomes in terms of continuing schooling, avoiding economic inactivity, staying off public assistance, and continuing to live at home. Additionally, we find that mothers' reports of financial stresses are associated with young people making earlier transitions to inactivity and public assistance, while youth reports of financial stresses are associated with earlier nest-leaving. Maternal reports of borrowing constraints are also associated with earlier youth transitions to inactivity and public assistance. These relationships are striking given that we also account for both the economic resources and demographic characteristics of the youths' households. Finally, our multivariate analyses indicate that young people who report conflict with their parents leave school and move out of the family home earlier than their peers, while parents' reports of conflicts with each other are associated with young people making later transitions. Taken together, these results suggest that financial stress and family conflict have independent effects on the transition into adult roles over and above those associated with economic resources per se. Moreover, youths' perspectives on the family's financial position and relationships have very different consequences to those of their mothers.

In the next section of the paper, we review the institutional context that is most relevant for young Australians. Details of our estimation sample are provided in Section 3, while Section

4 discusses our conceptual framework and estimation strategy. Estimation results are reported in Section 5. Finally, our conclusions are presented in Section 6.

2. Youth in the Australian Context

The extent to which young people must rely upon family support as they transition into adult roles depends a great deal on the economic, social and institutional context in which they find themselves. Government policy, in particular, plays an important role in shaping the level, timing, and type of family support that young adults are likely to require as they complete their educations, enter the labor market, and establish independent households. Given this, we begin by reviewing the social policy which underpins outcomes for young Australians.

Unlike employment and income-support policy which are Commonwealth (federal) prerogatives, Australia's education policy is the responsibility of its six States and two Territories. This dispersion of responsibilities results in differences in the structure of education (compulsory schooling ages, curricula, school financing, etc) across jurisdictions (see OECD 2009). In general, however, Australian children enter a preparatory school year (Kindergarten) at age five, complete a further six years of primary school, and leave secondary school after finishing 12th grade. Approximately two-thirds of school-aged children attend government (public) schools, while one third attend a variety of non-government (private) schools (ABS 2006b).[2] Schooling is compulsory until the age of 15 or 16; however, the proportion of Australian students continuing their formal schooling after age 16 is much lower than in many other OECD countries with as many as 30 percent of young people not completing 12th grade (ABS 2006a; OECD 2009).

[2] Non-government schools typically receive the majority of their funding (57 percent in 2004) from government sources, and the remainder from private income (primarily school fees). Government schools receive almost all of their funding (91 percent in 2004) from government sources (ABS 2006a).

At the same time Australia, like many other countries, has witnessed an increase in the proportion of young people participating in post-secondary (tertiary) education.[3] Over the 1990s, there was an expansion of the apprenticeship system and the introduction of vocational education and training (VET) into secondary schools. These changes lead to a rapid increase in the proportion of young adults holding VET certificates (OECD 2009). Moreover, the proportion of young people aged 20 – 24 enrolled in higher education increased by 76.3 percent over the decade (ABS 2000). This dramatic expansion of the university system was financed by the Higher Education Contribution Scheme, introduced in 1989, which allows Australian students to finance the direct costs of their higher education by taking out an income-contingent loan from the Australian Government. The debt is repaid through the tax system once an individual's income exceeds a minimum threshold.[4] Students, however, must finance their living costs while studying out of their own earnings or by turning to their families, the social assistance system, or a combination of the two for help.[5]

Perhaps not surprisingly, young Australians are increasingly combining continued study with employment. More than half (56.3 percent) of Australian youth aged 15 - 19 participate in the labor market, and participation rates rise to 79.1 percent for young adults aged 20 - 24. As in other countries, unemployment is more common among young people than older adults. However, unemployment rates for young Australians are somewhat lower than the OECD average, while participation and employment rates are substantially higher (OECD 2002).[6] Generous minimum wage policies may contribute to these high levels of participation. Although

[3] In Australia, post-secondary (tertiary) education is delivered by universities as well as technical and further education (TAFE) colleges and is regulated through a national system of qualifications.
[4] Currently, the repayment threshold is $41,595 AUD with repayments beginning at four percent and rising to eight percent of taxable income as income rises above this amount.
[5] In contrast, in the United States students' living expenses can be financed through student loans or other forms of financial assistance in the same way as direct educational costs.
[6] The ABS (2004) reports that 47.6 percent of youth aged 15 – 19 and 72.2 percent of young adults aged 20 – 24 were employed in 2004.

Australia has sub-minimum wages for youth (typically these are set at 50 percent of the adult minimum at age 16 and rise by 10 percentage points for each year of age until they reach the adult minimum at age 21), minimum wages are still high by international standards.[7]

The Australian Government provides assistance to young adults completing their education and entering the labor market primarily through its Youth Allowance program.[8] Youth Allowance provides financial support to young (resident) Australians who are either i) engaged in full-time study (including apprenticeships) and aged 16 - 24 and/or ii) actively seeking work and aged 16 - 20.[9] Benefits are subject to means tests which generally apply to parental income and assets. In some circumstances, however, these income and asset tests are applied solely to the youth.[10] In either case, payments are made directly to youths if they are over the age of 18 and to parents (or guardians) if they are not. Recently proposed changes to the Youth Allowance program are intended to improve the targeting of payments towards young people in low-income families. If approved, these changes would also substantially reduce the number of young people who are able to qualify for assistance on the basis of their own rather than their parents' incomes (Australian 2009). This policy initiative reflects the Australian government's view that – whenever possible – families should support their children until they have achieved financial independence (Luteria and Bourne 2000; Schneider 1999; Welfare Rights Centre 2005).

[7] In 2006, the Australian federal minimum wage was 57 percent of full-time median weekly earnings in comparison to 48 percent in the U.K. and 31 percent in the U.S. (OECD 2009).

[8] For more details see online Australian Government publications Centrelink (2008a,b) and Family Assistance Office (2008).

[9] Unemployment benefit levels are lower for those under the age of 21 which Maas (1990) argues has contributed to the financial dependency of young people.

[10] Currently, the parental means test does not apply if a young person can demonstrate that he or she has been employed a minimum number of hours in the previous two years or has met an earnings threshold over an 18 month period since leaving secondary school or if his or her parents are receiving welfare payments. Young people can be considered independent of their family for the purposes of Youth Allowance in a number of other situations including marriage, long-term de facto relationships, extreme family breakdown, etc.

Given this institutional context, it is not surprising that the nature and timing of residential independence for young Australians has also evolved as economic, social, and cultural circumstances have changed. Today fully 52.0 percent of men and 39.0 percent of women aged 20 – 24 live with their parents (Weston et al., 2001). [11] This represents an increase of 14.3 (men) and 57.3 (women) percent over living arrangements in 1979. These rising rates of co-residence are indicative of a broader pattern of increasing financial dependence of young Australians on their parents. Not only are young adults less likely to leave home, they are more likely to receive financial support from their parents when they do live apart and more likely to return home as circumstances change (see Hartley, 1993; Schneider, 1999).

3. Household, Income and Labour Dynamics in Australia (HILDA) Survey

3.1 Estimation Sample:

The data for our empirical analyses come from the first seven waves of the HILDA Survey which collects annual longitudinal information from a nationally-representative sample of more than 7,600 Australian households encompassing almost 20,000 individuals aged 15 and older (see Watson 2009). The HILDA Survey is a broad economic and social survey that pays particular attention to people's economic and social wellbeing, demographic circumstances, and labor market behavior. The survey began in 2001 and follows all individuals, including children and teenagers, who were living in, born to, or adopted by households that were initially sampled (Watson 2009). In each wave, information is gathered from every household member aged 15 and older through face-to-face interviews and self-completed questionnaires.

[11] Co-residence rates in Australia are relatively low in comparison to Mediterranean Europe and are more similar to those in the United States, Canada, and other parts of Europe (Cobb-Clark 2008).

Our analysis sample includes youths who provided interviews and self-completed questionnaires once they became eligible to participate in the HILDA Survey at age 15. Our analyses focus on annual transitions in youths' outcomes, so we limit the sample to youths who entered the survey in the first six waves (i.e., those for whom we might have information at age 16). Because we are also interested in youths' parents and household circumstances, we restrict our attention to youths who were co-residing at age 15 with their biological or adopted mothers, who also provided interviews and self-completed questionnaires. There were 1,553 youths who were continuing sample members at age 15 during the first six waves of the survey. We dropped 124 youths who did not provide self-completed questionnaires at age 15 and dropped a further 163 who were not residing with biological or adopted mothers who provided self-completed questionnaires. We also dropped 105 youths with item non-response for our explanatory variables, leaving an analysis sample with 1,161 youths (75 percent of the initial age-eligible continuing sample members).

3.2 The Transition into Adult Roles:

Our interest is in four important transitions that young people might make as they move into adulthood: i) the first instance of leaving full-time schooling; ii) the first instance of becoming economically inactive (of neither working nor attending school); iii) the first instance of directly receiving public assistance; iv) and the first instance of living apart from parents. For each of these transitions, we begin by creating binary indicators of the underlying outcomes at each age the youth is observed. For example, we construct dummy variables corresponding to full-time school enrollment at age 15, age 16, etc. Next, we create a transition indicator which equals one if the underlying status changed from one year to the next and zero otherwise. In the case of

schooling, a school-leaving transition would occur at age 16 if the youth attended school at age 15 but did not attend at age 16. When analyzing the determinants of these transitions, we restrict the relevant samples to youths who were "at risk" of a transition at age 15, that is, those who were initially in school, economically active, or not receiving transfers. As mentioned, all of the youths were initially living at home. Table 1 lists age profiles of the underlying incidence for each of the four outcomes along with the hazard of making a first transition.

Table 1 Here

The initial incidence of school drop-out is relatively low in our sample. At age 16, just over five-sixths of young people are attending school full-time. The rates of school leaving are highest at ages 18 and 19. By age 21, nearly three-quarters of the sample are no longer full-time students. The incidence of economic inactivity is very low at all ages, ranging from 5 percent at age 16 to 13 percent at age 18 when the peak in the rate of transition to inactivity occurs.

Many Australian youths qualify for, and begin receiving public transfers, for the first time at age 16. Most of these transfers are Youth Allowances (see Section 2). At age 16, one in five youths is receiving public transfers; by age 21, this ratio rises to nearly one in three youths. The hazard rate for beginning to receive assistance is highest at age 16; it falls and then begins increasing at age 19 when youths begin forming families.

Rates of co-residence in the analysis sample are consistent with national estimates. By age 18, nearly five-sixths of youths are estimated to be living with their parents. By age 21, just over half are co-residing. The transition rate out of the parents' home is fairly modest and steady from age 18 onward.

3.3 Accounting for Household Resources, Financial Stress, and Family Conflict:

Given the importance of economic resources in determining youths' outcomes (Haveman and Wolfe 1995; Duncan and Brooks-Gunn 1997), our analyses include controls for the household's total gross income for the preceding financial year. We also control for: i) whether or not any of the household's income comes from government transfers; ii) the total number of children and adults in the household; and iii) whether the family owns (or is purchasing) its home. These measures are useful in understanding the extent to which the household might be economically disadvantaged. At the same time, there is considerable evidence that youths' perceptions of the household's financial situation are important in understanding the consequences of economic disadvantage for youths' schooling and mental health (Clark-Lempers et al. 1990; Lempers and Clark-Lempers 1997; Mistry et al. 2009).

Our study is unique in including measures of financial stresses that are reported by the mother and the youth. Specifically, in each wave of the HILDA, respondents who receive the self-completed questionnaire are asked whether – "because of a shortage of money" – the respondent during the current calendar year: i) could not pay electricity, gas or telephone bills on time, ii) could not pay the mortgage or rent on time, iii) pawned or sold something, iv) went without meals, v) was unable to heat home, vi) asked for financial help from friends or family, or vii) asked for help from welfare/community organizations. Using these seven indicators of financial stress, we form separate scales for the mother and youth which equal the proportion of affirmative responses. Each scale ranges from 0-1 with higher scores corresponding to greater financial stress. The inter-item reliability is high (Cronbach's α was .71 for the mothers' scale

and .72 for the youths'), indicating that the responses can be grouped.[12] As a measure of possible credit constraints, we include an indicator of whether the mother reported that she would have to "do something drastic" or "couldn't" raise $2000 AUD in an emergency."[13]

Our study is also unique in including measures of household conflict. Controlling for conflict between family members is important in light of the evidence that poverty and economic hardship can undermine parenting practices (see Mcloyd and Wilson, 1990; Hansen et al. 1997 for reviews) and that poor relationships and exposure to conflict have negative consequences for children and adolescents (Morrison and Coiro, 1999; Hair et al. 2009). In each wave of the HILDA survey, respondents are asked about their satisfaction with their relationships with various family members. Responses are given using a Likert scale that ranges from completely dissatisfied (0) to completely satisfied (10). We use responses of three or lower as indicating an unsatisfactory relationship.[14] We consider the conflict within several relationships. We include an indicator of whether the youth reports having an unsatisfactory relationship with his or her parents. We also include an indicator of whether the youth's mother reports an unsatisfactory relationship with her children. For lone mothers, we include an indicator of reporting an unsatisfactory relationship with her most recent spouse or partner, and for married parents, we have an indicator of either spouse reporting dissatisfaction with the other.

Our multivariate analyses also include several other demographic and economic controls. We include measures of the child's gender, migrant status, and aboriginal background. We also use several measures of household structure, including the partnership status of the mother (lone mother or remarried—the omitted category is married to the child's father) and the age of the

[12] Exploratory factor analyses also indicated that a single latent factor adequately explained the correlations among the financial stress responses for each person. Our multivariate results are robust to using predicted factor scores instead of the proportion of affirmative responses.
[13] Alternative responses included that she could raise that amount "easily" or "with some sacrifice".
[14] Sensitivity analyses reveal few differences with changing the cut-off by a point either way.

youngest child. As measures of parents' economic capabilities, we also include measures of the highest educational attainment among the parents, the highest occupational status, and an indicator for the occupational status being missing.[15]

Table 2 provides descriptive statistics for our financial stress, family conflict, and other explanatory variables measured when the youths in our sample were 15 years old—that is, when they were initially at risk for the transitions we consider. The first column in Table 2 gives means for the entire sample. The subsequent columns list means for all youths who were observed at age 18 as well as for youths conditional on their outcomes at that age.

Table 2 Here

An examination of Table 2 reveals that the average incidence of reported financial stresses is low, with mothers reporting an average of half a stress and youths reporting less than a quarter of a stress. The lower incidence of reported financial stresses among youths is consistent with parents partially protecting their children from economic shocks. As we look across the table, young people are more likely to report some form of financial stress if they are out of school, inactive, receiving public transfers, or living apart from their parents.

There are even fewer reports of conflict between family members. In the bivariate analyses, adolescents' reports of conflicts with their parents are not associated with having left school, become inactive, joined the public assistance rolls, or moved out of their parents' homes by age 18. Mothers' reports of conflicts with their young-adult children are, however, associated with worse outcomes for adolescents. The results for our indicator of mothers' reported conflict with their former partners are harder to interpret because they pertain only to lone or remarried mothers. When we condition on partnership status, we find that there is no consistent

[15] In sensitivity analyses, we experimented with including controls for additional characteristics, such as the mother's and youth's physical and mental health, the interviewer's assessment of the dwelling condition, and initial conditions of the household when the youth was age 15. These did not alter our reported findings.

relationship between a mother's conflict with her former partner and her child's transition to adult roles. A similar interpretive issue arises for reports of conflict among spouses. Spousal conflict appears to be associated with better outcomes for youths once we condition on partnership status.

The patterns for our other economic variables conform to expectations. Low incomes, borrowing constraints, family public assistance receipt, low parental schooling, and low parental occupational attainment are all associated with worse outcomes for youths at age 18. Home ownership is associated with better outcomes. An obvious limitation of these bivariate comparisons is that they do not condition on other variables or account for changes over time in circumstances. Our multivariate analyses address these issues.

4. Estimation Strategy

Economists typically adopt a noncooperative game theoretic when modeling the interaction between parents and their adolescent children (see McElroy 1985; Weinberg 2001; Kooreman 2004; Hao et al. 2007; Lundberg et al. 2007). Unlike the cooperative approach often adopted in models of bargaining between spouses, adolescents are better seen as economic agents with independent preferences and the power to influence family outcomes (Lundberg et al. 2007). Parents can be thought of as principals who may care about their children's characteristics or behavior – rather than their utility or wellbeing per se. The result is a noncooperative, principal-agent model in which parents strategically use their economic resources to influence their children's decisions.[16] Ermisch (2003), for example, uses this basic framework to develop a theoretical model of intergenerational co-residence in which altruistic parents pre-commit to transferring specific financial resources to their young-adult children depending on the family's

[16] In effect, parents may have paternalistic rather than altruistic preferences (see Pollak 1988).

living arrangements. Similarly, Weinberg (2001) models parents' ability to shape their children's behavior through the use of pecuniary incentives, while Hao et al. (2008) demonstrate that parents may withhold financial support from adolescents who engage in risky behavior in an effort to dissuade their younger children from such behavior when they reach adolescence. In short, adolescents are themselves decision makers and parents are left trying to strategically influence those decisions.

Given this, we begin with a simple conceptual framework in which a family's ability to support a young person's human capital and labor market investments is undermined by the financial stress and family conflict that often accompany limited economic resources. Thus, we draw an important distinction between the lack of economic resources (i.e., low income relative to needs, the receipt of public transfers) and the consequences of that for the household's day-to-day financial management (i.e., an inability to pay the bills, the need to borrow money) and consumption (i.e., pawning something, going without meals or heat). We also wish to take seriously the notion that parents' responses to economic difficulties are the mechanism through which economic hardship affects adolescent outcomes (see Conger et al. 1997). In particular, parents with limited financial resources may be constrained in their ability to use pecuniary incentives to support the choices they favor (e.g., remaining in school, living at home) and penalize the choices they do not (e.g., becoming economically inactive, receiving public transfers). Parents' ability to make household consumption decisions and to strategically reallocate economic resources makes it very important to account for youths' perceptions of financial stress and conflict when analyzing the decisions they make.

Drawing upon this conceptual framework, we estimate multivariate models of youths' transitions out of school, into economic inactivity, into transfer receipt, and out of their parents'

homes. We are especially interested in understanding how financial conditions and family conflict are associated with these transitions and use our multivariate models to account for confounding influences from other variables. In particular, we estimate discrete-time logistic hazard models of each transition (Allison 1982). Specifically, the hazard, $h(t)$, of a youth making a given transition between age t and age t+1 is modeled as

$$h(t) = \frac{\exp\left(A'T(t) + B'X(t)\right)}{1 + \exp\left(A'T(t) + B'X(t)\right)} \tag{1}$$

where T(t) represents a vector of age dummy variables; X(t) is a vector of other observed and possibly time-varying explanatory variables, including economic and demographic characteristics of the household, and A and B are vectors of coefficients to be estimated.

We estimate two alternative specifications for each model: i) a baseline model which excludes measures of financial stress, borrowing constraints, and family conflict; and ii) an augmented model which adds these measures. These alternative specifications shed light on the way in which the effect of economic resources (most importantly household income) might be confounded by perceptions of financial stress and family conflict. Results (logistic hazard coefficients and standard errors) from these alternative specifications are presented in Tables 3 and 4.

Tables 3 and 4 Here

5. The Link Between Financial Stress, Family Conflict, and Youth Transitions

5.1 Results from the Baseline Model

The estimates from the hazard models indicate that youths' transitions into adult roles are linked to the economic resources of their families. Consistent with much of what is known about the effect of family income on children's life chances (see Haveman and Wolfe 1995; Duncan and

Brooks-Gunn 1997, for example), we find that higher family income significantly reduces the rates at which young people leave school, become economically inactive, and begin receiving public transfers. A 10 percent increase in household income, for example, is estimated to decrease the hazard of leaving school by 1.0 percent which is consistent with the elasticities historically estimated in U.S. studies (Haveman and Wolfe 1995; Hill and Duncan 1987). Although we are unable to separate the effects of low permanent income from transitory income shocks given the length of our panel, both may be important in limiting educational attainment (see Chevalier, et al. 2005). Young people are also less likely to become economically inactive or to begin receiving public assistance as their family incomes increase. The magnitudes of these effects – falls in the hazards of 1.3 percent (inactivity) and 1.6 percent (welfare) for each 10 percent increase in income – are similar to those estimated for transitions out of education suggesting that earlier school leaving is not fully compensated by successful transitions into the labor market.

In contrast, there is only a modest and statistically insignificant relationship between a young person leaving home and his or her family's income. Young people do have a substantially lower hazard of moving out if their family owns their own home, however. This pattern of results fits with previous evidence that while transferable parental resources promote youths' residential independence, non-transferable resources – such as high quality housing services – hinder it (De Jong Gierveld et al. 1991; Laferrère and Bessière 2003). Home ownership is also negatively associated with transitions to public assistance and economic activity, though the latter result falls short of statistical significance.

The source of the family's income also influences the transitions that adolescents make. Specifically, there is a strong intergenerational correlation in the receipt of public benefits with

young people in families receiving transfer income from the government facing an almost fourfold (388 percent) increase in the hazard of themselves receiving income support. This relationship is not surprising in light of the vast international literature documenting the link between the welfare receipt of parents and children at least some proportion of which appears to be causal (see Antel 1992; Beaulieu et al. 2005; Corak et al. 2000; Gottschalk 1992; Solon et al. 1988).

In contrast, young people have a somewhat lower (24 percent) hazard of leaving school, if their families receive public benefits than if they do not. As our model also controls for household income, this result implies that – compared to households with an identical income level derived solely from private sources – receiving some public transfer income is associated with an increased propensity for young Australians to remain in school. This result is at odds with evidence indicating that welfare participation is associated with lower educational attainment for U.S. children (see Haveman and Wolfe 1995). The differential effect of public income on youths' education in the two countries may stem from institutional differences in the level and availability of welfare benefits. Relative to the United States, public benefits in Australia are more generous and more widely available.

Finally, there is no significant effect of public transfer income on the likelihood that young people move out of their parents' homes. Thus, taken together, our results provide no evidence that the residential decisions of young Australians are linked to the economic resources of their parents, other than home ownership.

We turn now to consider the way in which household composition – in particular, family type, household size, and age composition – affects youth transitions. Young people living with their mothers and a step-father have higher hazard rates of leaving school, becoming

economically inactive, and moving out than do young people living with both of their parents. These effects are quite substantial ranging from an increase of 158 percent in the hazard of leaving home to a 101 percent increase in the hazard of becoming economically inactive. Everything else equal, living with a single mother doubles a youth's hazard of moving on to the public-benefit rolls but is not strongly related to other transitions. The numbers (and age composition) of other individuals living in the household are generally unrelated to young people's successful transitions into adult roles. The exception is that larger numbers of children in the household reduce the hazard of a young person becoming economically inactive.

The estimated effects of demographic characteristics on school leaving, economic inactivity, public transfer receipt, and moving out are as expected. Young women are less likely to leave school, but are more likely to leave home than their male counterparts. This is consistent with gender differences in school enrollment rates and co-residence patterns in Australia (see ABS 2006b; Cobb-Clark 2008). Immigrant youth are also more likely to remain in school and at home, while Aboriginal and Torres Strait Islander youth are significantly more likely to leave school, become economically inactive, and move onto public benefits. These transitions for indigenous youth almost certainly reinforce the substantially higher level of disadvantage within the indigenous community more generally (see FaHCSIA 2009).

Finally, we consider the effect of parents' socio-economic status on young people's transitions into adult roles. We account for the family's socio-economic status by controlling for the highest educational qualification and occupational status attained by either of the youth's parents. Young people have a lower hazard of leaving school as their parents' educational attainment and occupational status increases. They also have a lower risk of entering public

assistance as their parents' occupational status increases. However, transitions to economic inactivity and living apart are not strongly associated with these parental characteristics.

5.2 The Roles of Financial Stress, Borrowing Constraints, and Family Conflict

The results from our baseline model indicate that family income, the receipt of public transfers, and home ownership are linked to young people's transitions into adult roles. Our goal is to understand whether – conditional on the family's economic resources – financial stress, borrowing constraints, and conflict among family members independently limit youths' ability to make successful transitions. Moreover, we would like to account for youths' perspectives on their families' financial position and relationships, in addition to those of their mothers, in producing these outcomes. The results from our augmented model in Table 4 shed light on these issues.

Mothers' reports of financial stresses are strongly related to young people making earlier transitions to economic inactivity and public assistance. A report of one additional stress (an increase of .14 in our scale) results in a 23 percent increase in the hazards of both becoming inactive and going onto public assistance. Moreover, young people leave school earlier, but remain at home longer, if their mothers report experiencing financial stress, though the effects while sizable are imprecisely estimated. Taken together, the symmetry in the effect of financial stress across the range of outcomes (in particular economic inactivity and public assistance receipt) suggests that mothers' financial stress may be linked to poorer labor market outcomes for their young-adult children. On the other hand, youths leave home earlier if they report their family is financially stressed; each additional reported stress (recall that such reports are rare) raises the hazard by 80 percent. Youths' reports of stresses are also positively associated with

public assistance receipt and negatively related to inactivity, though the results are statistically insignificant. It is striking that these estimated effects are substantial, despite accounting for the effects of low economic resources generally, and differ for youths and their mothers.

In interpreting the results, it is important to note that our estimates hold other conditions constant, including the other family member's report of financial stress. Thus, the coefficient on the mother's report of financial stress captures the relationship between that report and a given transition, assuming no change in her child's report of financial stress or in other economic circumstances. Similarly, the coefficient on the youth's report of financial stress represents a relationship, holding the mother's report of the family's financial situation constant. Given this, one interpretation of the coefficient on the mother's report of financial stress is that it represents the effect of a stress that was mitigated (experienced by the mother but not by the youth). Although youths might not experience them, mitigated stresses would reduce family resources. This would be consistent with mothers' reports of financial stress contributing to youths' earlier transitions into inactivity, onto public assistance, and possibly out of schooling. A stress experienced only by the adolescent is potentially more pernicious—the stress is transmitted to or imposed on the youth but not the mother. The strong positive link between youth-reported stresses with nest-leaving is consistent with this interpretation.

The estimates also indicate that borrowing constraints matter for transitions to economic inactivity and public assistance. A mother's inability to raise $2000 if she faces an emergency increases the hazards that her child will become economically inactive or move onto the public assistance rolls by 60 percent each. In contrast, there is no significant relationship between self-reported borrowing constraints and either schooling or co-residence. This latter result is somewhat surprising in light of evidence that a family's inability to fully smooth transitory

income shocks can be associated with the lower educational attainment of its children (Chevalier, et al. 2005). Consistent with the discussion above, this overall pattern of results points to a link between mothers' financial stress and the labor market outcomes of their children.

Youths are more likely to leave school and to move out if they report conflict with their parents. In particular, the hazard of leaving school is approximately 70 percent higher among youths who report dissatisfaction in their relationships with their parents than among those who do not. Similarly, reporting conflict with ones parents is associated with a sharp (267 percent) increase in the hazard of subsequently living independently. These results differ from the bivariate associations in Table 2, which did not account for other influences. We also obtain sizeable estimates of the associations between mothers' reports of conflict with their children and youth transitions; however, these estimates have large standard errors, leading to inconclusive results.

Conflict between parents also appears to be related to youths' inability to make a successful transition to adult roles but in ways that are difficult to understand. While youths in single-parent families have a significantly higher hazard of living independently (157 percent) when their mothers report conflict with their former partner than when they do not, the hazards of leaving school and becoming inactive are lower for youths living in couple-headed families when their parents report conflict with each other than when they do not.

To what extent is there evidence that economic hardship affects adolescent outcomes primarily through parents' responses to economic difficulties as many psychologists have argued (see Conger et al. 1997)? Has separately accounting for the role of financial stress and family conflict altered our understanding of the link between economic resources and the ability of young people to successfully transition into adult roles? It seems clear that our understanding of

the factors underlying the successful transition into adulthood is enriched by taking family members' perceptions of financial stress, borrowing constraints, and family conflict into account. Specification tests indicate that the financial stress, borrowing constraint, and conflict measures are jointly significant in the inactivity, public assistance, and co-residence models and marginally insignificant (p = .13) in the schooling model. Financial stress and family conflict have independent effects on the transition into adult roles over and above those associated with economic resources per se. Moreover, youths' perspectives have very different consequences to those of their mothers.

At the same time, if a lack of economic resources primarily affects outcomes by increasing financial stress and generating family conflict, we would expect that the estimated effect of additional economic resources – in particular family income – on promoting the successful transition to adult roles would be attenuated once we directly control for financial stress, borrowing constraints, and family conflict. Instead we find only modest differences in the magnitudes of the income and other economic coefficients between Tables 3 and 4. This suggests that, while financial stress and family conflict have important effects on the transitions that young people are likely to make, these effects are independent to those associated with the family having limited financial resources. In other words, while positive family relationships and a lack of financial stress help young people to successfully navigate the transition into adulthood, parents may not be able to completely compensate for the lack of financial resources by reducing financial stress and maintaining good relationships with their children.

5.3 Sensitivity Analysis: Early Transitions to Residential Independence

Our results indicate that limited financial resources increase the chances of young people leaving school, becoming economically inactive, and joining the welfare rolls. In contrast, household income, public-transfer receipt, and credit constraints appear to play less of a role in the decision of young adults to live separately from their parents. Co-residence patterns are also not related to socio-economic status. One possible explanation for this divergence is that unlike the other transitions we consider, the transition to residential independence may be associated with successfully adopting adult roles by moving into higher education or entering the labor market.

We investigate this issue by using the detail of the HILDA data to create a number of additional indicators of what might be considered to be residential independence that in some sense occurs too early. Specifically, we create the indicators of "early" residential independence which equal 1 if a youth: i) leaves home and is not a studying; ii) leaves home before 12th grade and is not studying; or iii) leaves home before age 18 and is not studying; and 0 otherwise. In total, there are 1161 youth initially at risk of leaving home. Of these we observe 155 leaving home and not studying, 63 leaving home before 12th grade, and 32 leaving home before age 18. As before, we estimate discrete-time logistic hazard models for each measure of early home leaving. Coefficients and standard errors from these models are presented in Table 5. For convenience, our previous results for the general model of co-residence transitions are presented in column 1.

Table 5 Here

Consistent with our previous results (see column 1), we find little evidence that a youth's early transition out of his or her parent's home is related to the family's financial resources, other than home ownership. At the same time, young people do have a higher hazard of leaving home

and not pursuing further education if they report financial stress. Youths' perceptions of financial stress are also estimated to have large positive associations with leaving home before 12th grade or before age 18 to do something other than study. However, the small number of such transitions leads to very large standard errors and inconclusive results.

Finally, although there is modest but statistically insignificant relationship between mothers' reports of conflict with their children and the hazard of young people moving out generally, the hazard of leaving home early appears to be higher in families in which mothers report poor relationships with their children. Moreover, young people's hazard of moving out and not pursuing education is almost four times higher (375 percent) if one of his or her parents reports conflict with the other. In contrast, there is no significant effect of parents' conflict with each other on moving out in general.

Thus, these sensitivity tests indicate the lack an effect of financial resources on residential independence irrespective of the measure considered. In contrast, there is some evidence that the link between financial stress and family conflict on the one hand and young people's decisions to live apart from their parents on the other depends on whether or not residential independence is occurring "early." Early transitions out of the family home are more likely when families experience financial stress and family conflict.

6. Conclusions

Families are not equally well positioned to support their young-adult children in successfully negotiating the transition to independent adulthood. Limited economic resources often constrain the opportunities that families are able to provide to young people. Moreover, the negative effects of economic disadvantage may be exacerbated by the financial stress and family conflict

that often accompany a lack of economic resources. If a young person's transition into an adult role is also limited by his or her perceptions of family financial stress and conflict, public policies that simply target additional resources to families may only indirectly improve his or her life chances.

This paper analyses the effect of financial stress and family conflict on youths' transitions out of school, into economic inactivity, onto public assistance, and out of their parent's homes. Unlike the previous literature, we take advantage of unique, nationally-representative panel data for Australia to separately account for the effects of economic resources (in particular, household income and the receipt of public transfers) as well as parents' and youths' perceptions of financial difficulty and family conflict on adolescents' transitions into a number of adult roles. We find, not surprisingly, that young people's ability to successfully negotiate the transition into many adult roles increases as the economic resources of their families increase. The exception is that there is no effect of economic resources (other than home ownership) on residential independence irrespective of whether we focus on "early" transitions out of the parental home or not. Moreover, financial stress, borrowing constraints, and family conflict limit youths' ability to remain in school, stay economically activity, stay off the welfare rolls, and avoid leaving their parents' homes too early. Reports of financial stress, in particular, may be capturing changes in family needs, such as unexpected bills, or difficulties managing available resources which compound the effects of economic disadvantage.

These results lead to a number of important conclusions. First, it seems clear that our understanding of the factors underlying the successful transition into adulthood can be enriched by taking family members' perceptions of financial stress, borrowing constraints, and family conflict into account. Each of these factors has a sizable effect on the transition into adult roles

over and above those associated with economic resources per se. Second, the estimated effect of family income is virtually unchanged after we account for the effects of stress, constraints and conflict indicating that these latter effects are independent to those associated with the family having limited economic resources. In practical terms, this independence implies that strategies need to be developed to both raise limited economic resources as well as reduce the stress and conflict that often accompany economic disadvantage. Parents, for example, may not be able to completely compensate for their lack of financial resources by reducing financial stress and maintaining good relationships with their children. Moreover, government policy, while continuing to target financial resources to families in need, may also need to adopt initiatives to promote sound financial management and supportive family relationships. Finally, the consequences of youths' own perspectives of financial stress and family conflict are very different to those of their mothers. This implies that it is important to account directly for young people's views of the family's financial position when attempting to understand the implications of economic disadvantage for youths' outcomes. Future data sources would be strengthened by collecting information from all family members about the way that limited economic resources affect the family's ability to meet its day-to-day needs and maintain effective relationship.

References

Allison, Paul D. 1982. "Discrete-Time Methods for the Analysis of Event Histories." *Sociological Methodology*, vol. 13, pp. 61-98.

Antel, John. 1992. "The Intergenerational Transfer of Welfare Dependency: Some Statistical Evidence," *Review of Economics and Statistics*, 74(3), pp. 467-473.

Australian (2009) Youth Allowance Criteria Face Senate Review, by Patricia Karvelas, 22 May 2009, available at: www.theaustralian.news.com.au.

Australian Bureau of Statistics (ABS), 2000. *Australian Social Trends, 2000*. Catalogue No. 4102.0, Australian Bureau of Statistics, Canberra.

----- (2006a) *Australian Social Trends, 2006*. Catalogue No. 4102.0, Australian Bureau of Statistics, Canberra.

----- (2006b) *Schools Australia*, Catalogue No. 4221.0, Australian Bureau of Statistics, Canberra.

Australian Fair Pay Commission (AFPC), 2006. Wage-Setting Decision, October 2006. Available: www.fairpay.gov.au. Accessed 16 April 2009.

Australian Fair Pay Commission (AFPC), 2008. Wage-Setting Decision and Reasons for Decision, July 2008. Available: www.fairpay.gov.au. Accessed 16 April 2009.

Becker, Sascha O., Bentolila, Samuel, Fernandes, Ana, and Andrea Ichino, 2005a. 'Job Insecurity and Youth Emancipation: A Theoretical Approach', Centre for Economic Policy Research Discussion Paper No. 5339, November.

Becker, Sascha O., Bentolila, Samuel, Fernandes, Ana, and Andrea Ichino, 2005b. 'Youth Emanciapation and Perceived Job Insecurity of Parents and Children', Centre for Economic Policy Research Discussion Paper No. 5338, November.

Beaulieu, Nicolas, Duclos, Jean-Yves, Fortin, Bernard, and Rouleau, Manon, 2005. "Intergenerational Reliances on Social Assistance: Evidence from Canada", *Journal of Population Economics*, Vol. 18, pp. 539-562.

Bray, J. Rob, 2001. "Hardship in Australia: An Analysis of Financial Stress Indicators in the 1998-1999 Australian Bureau of Statistics Household Expenditure Survey" Occasional Paper No. 4, Department of Family and Community Services, December.

Breunig, Robert and Deborah A Cobb-Clark, 2005. "Understanding the Factors Associated with Financial Stress in Australian Households", *Australian Social Policy*, pp. 13 – 64.

Card, David and Thomas Lemieux, 1997. 'Adapting to Circumstances: The Evolution of Work, School, and Living Arrangements Among North American Youth', NBER Working Paper 6142, August, 1997.

Centrelink, 2008a. *Information you need to know about your claim for Austudy and Youth Allowance.* Canberra: Australian Government. Document ci00_0807en_p.pdf downloaded from http://www.centrelink.gov.au on 2008/12/01.

Centrelink, 2008b. *Youth Allowance Brochure.* Canberra: Australian Government. Document st002_0712en.pdf downloaded from http://www.centrelink.gov.au on 2008/09/02.

Chevalier, Arnaud, Harmond, Colm, O'Sullican, Vincent, and Walker, Ian. 2005. "The Impact of Parental Income and Education on the Schooling of Their Children", Institute for the Study of Labor (IZA) Discussion Paper 1496, February.

Clark-Lempers, Dania S., Lempers, Jacques D., and Netusil, Anton J., 1990. "Family Financial Stress, Parental Support, and Young Adolescents' Academic Achievement and Depressive Symptoms", *Journal of Early Adolescence*, Vol. 10 (1), February, pp. 21-36.

Cobb-Clark, Deborah A. 2008. "Leaving Home: What Economics Has to Say about the Living Arrangements of Young Australians", *Australian Economic Review*, Vol. 41(2), June, pp. 160-176.

Conger, Rand D., Conger, Katherine Jewsbury, and Elder Glen H. Jr., 1997. "Family Economic Hardship and Adolescent Adjustment: Mediating and Moderating Processes" in *Consequences of Growing Up Poor*, Greg J. Duncan and Jeanne Brooks-Gunn (editors), New York: Russell Sage Foundation.

Conger, Rand D., Wallace, Lora Ebert, Sun, Yumei, Simons, Ronald L., McLoyd, Vonnie C., and Brody, Gene H., 2002. "Economic Pressure in African American Families: A Replication and Extension of the Family Stress Model" *Developmental Psychology*, Vol. 38 (2), pp. 179-193.

Corak, Miles, Gustafsson, Bjorn, and Osterberg, Torun, 2000. "Intergenerational Influences on the Receipt of Unemployment Insurance in Canada and Sweden", Institute for the Study of labor (IZA) Discussion Paper, 184.

De Jong Gierveld, Jenny, Liefbroer, Aart C. and Erik Beekink, 1991. 'The Effect of Parental Resources on Patterns of Leaving Home Among Young Adults in the Netherlands', *European Sociological Review*, vol. 7, pp. 55-71.

Families, Housing, Community Services and Indigenous Affairs (FaHCSIA), 2009. Closing the Gap on Indigenous Disadvantage: The Challenge for Australia, February, downloaded from http://www.fahcsia.gov.au on 2009/12/03.

Family Assistance Office, 2008. *Guide to Parents*. Canberra: Australian Government. Document fpr006_0809en.pdf downloaded from http://www.centrelink.gov.au on 2008/12/01.

Folgi, Alessandra, 2004. 'Endogenous Labor Market Rigidities and Family Ties', unpublished working paper, New York University and the Federal Reserve Bank of Minneapolis, September 2004.

Gottschalk, Peter, 1996. "Is the Correlation in Welfare Participation Across Generations Spurious?", *Journal of Public Economics*, 63, pp. 1-25.

Guio, Anne-Catherine, 2005. "Material Deprivation in the EU." Statistics in Focus: Population and Social Conditions report no. 21/2005. Luxembourg: Eurostat.

Hair, Elizabet C., Anderson Moore, Kristin, Hadley, Alena M, Kaye, Kelleen, Day, Randal D., and Orthner, Dennis K., 2009. "Parental Marital Quality and the Parent-Adolescent Relationship: Effects on Adolescent and Young Adult Health Outcomes", *Marriage and Family Review*, Vol. 45(2), pp. 218-248.

Hanson, Thomas L., McLanahan, Sara, and Thomson, Elizabeth, 1997. "Economic Resources, Parental Practices and Children's Well-Being", in *Consequences of Growing Up Poor*, Greg J. Duncan and Jeanne Brooks-Gunn (editors), New York: Russell Sage Foundation.

Hao, Lingxin, Hotz, Joseph, and Jin, Ginger Z., 2008. "Games Parents and Adolescents Play: Risky Behaviour, Parental Reputation and Strategic Transfers", *Economic Journal*, Vol. 118, pp. 515-555.

Hartley, Robyn, 1993. 'Young Adults Living at Home', *Family Matters*, no. 36, pp. 35-37.

Haveman, Robert and Barbara Wolfe, 1995. "The Determinants of Children's Attainments: A Review of Methods and Findings", *Journal of Economic Literature*, Vol. 33(4), December, pp. 1829-1878.

Haveman, Robert and Wolfe, Barbara, 2001. "An Incentive Model of the Effect of Parental Income on Children", *Journal of Political Economy*, Vol. 109 (2), pp. 266-280.

Hill, Martha and Dunca, Greg J., 1987. "Parental Family Income and the Socioeconomic Attainment of Children" *Social Science Research*, Vol. 16(1), pp. 39-73.

Kooreman, Peter, 2004. "Time, Money, Peers, and Parents: Some Data and Theories on Child Behavior", *Journal of Population Economics*, Vol. 20, pp. 9 – 33.

Laferrère, Anne and Sabine Bessière, 2003. 'Nest-living and Nest-Leaving: Does the Nest Matter?', unpublished working paper, June.

Lempers, Jacques D. and Clark-Lempers, Dania S., 1997. "Economic Hardship, Family Relationships, and Adolescent Distress: An Evaluation of a Stress-Distress Mediation Model in Mother-Daughter and Mother-Son Dyads", *Adolescence*, Vol. 32(126), Summer, pp. 339- 356.

Lundberg, Shelly, Romich, Jennifer, and Tsang, Kwok P., 2007. "Decision-Making by Children", Institute for the Study of Labor (IZA) Discussion Paper No. 2952, July.

Luteria, Maria and Jenny Bourne, 2000. "Financial Independence and Youth Allowance: Young People's and Parents' Views", paper presented at Family and Futures: Issues in Research

and Policy, 7th Australian Institute of Family Studies Conference, Sydney, 24 – 26, July 2000.

Maas, Frank, 1990. 'Shifting Responsibility: A Decade of Youth Policy', *Family Matters*, No. 26, April, 1990, pp.19-24.

Marks, Gary N. 2007. "Income Poverty, Subjective Poverty, and Financial Stress" Social Policy Research Paper No. 29, Department of Families, Community Services, and Indigenous Affairs.

McElroy, Marjorie B., 1985. "The Joint Determination of Household Membership and Market Work: The Case of Young Men", Journal of Labor Economics, Vol. 3(3), pp. 293-316.

McLoyd, Vonnie C. and Wilson, Leon, 1990. "Maternal Behavior, Social Support, and Economic Conditions as Predictors of Distress in Children", *New Directions for Child Development*, No. 46, Winter, pp. 49 – 69.

Mistry, Rashmita S., Benner, Aprile D., Tan, Connie S., and Kim Su Yeong, 2009. "Family Economic Stress and Academic Well-Being Among Chinese-American Youth: The Influence of Adolescents' Perceptions of Economic Strain", *Journal of Family Psychology*, Vol. 23 (3), pp. 279-290.

Morrison, Donna Ruane and Coiro, Mary Jo, 1999. "Parental Conflict and Marital Disruption: Do Children Benefit When High-Conflict Marriages are Dissolved?", *Journal of Marriage and the Family*, Vol. 61, August, pp. 626-637.

Organization for Economic Co-operation and Development OECD (2009) *Jobs for Youth Australia*, OECD Publishing, available at: *www.oecd.org/publishing/corrigenda*.

----- (2002) *Employment Outlook*, OECD Publishing, available at: www.oecd.org/publishing/corrigenda.

Pollak, Robert A., 1988. "Tied Transfers and Paternalistic Preferences", *American Economic Review*, Vol. 78(2), pp. 240-244.

Schneider, Judy, 1999. 'The Increasing Financial Dependency of Young People on Their Parents', SPRC Discussion Paper No. 96, February.

Solon, Gary, Mary Corcoran, Roger Gordon, and Deborah Laren. 1988. "Sibbling and Intergenerational Correlations in Welfare Program Participation" *The Journal of Human Resources*, 23, pp. 388-396.

Smyth, Bruce, 2000. 'Child Support for Young Adult Children', *Family Matters*, No. 55, Autumn, pp. 41-45.

Watson, Nicole, (ed.), 2009. *HILDA User Manual – Release 7*, Melbourne Institute of Applied Economic and Social Research, University of Melbourne.

Weinberg, Bruce A., 2001. “An Incentive Model of the Effect of Parental Income on Children”, Journal of Political Economy, Vol. 109(2), April, pp. 266-280.

Welfare Rights Centre, 2005. “‘A Dog’s Breakfast’ – Income Support for Families and Young People”, unpublished report by the Welfare Rights Centre, Sydney for the National Welfare Rights Network, March 2005.

Weston, Ruth, Stanton, David, Qu, Lixia and Grace Soriano, 2001. ‘Australian Families in Transition’, *Family Matters*, No. 60, Spring/Summer, pp. 12-23.

Whittington, Leslie A. and H. Elizabeth Peters, 1996. ‘Economic Incentives for Financial and Residential Independence’, *Demography*, vol. 33(1), February, pp. 82-97.

Table 1. Age-profile of outcomes for adolescents

	Age					
	16	17	18	19	20	21
Out of school						
Hazard	12.6%	22.6%	41.8%	40.4%	23.1%	26.3%
Risk set	1,106	721	421	161	52	19
Incidence	14.9%	30.0%	53.5%	64.7%	66.9%	72.9%
Obs.	1,161	886	679	482	305	144
Inactive (neither working nor in school)						
Hazard	4.5%	6.5%	9.1%	5.4%	5.9%	1.3%
Risk set	1,131	804	559	334	187	78
Incidence	5.2%	8.1%	13.1%	11.8%	12.1%	11.1%
Obs.	1,161	886	679	482	305	144
Receiving public assistance						
Hazard	18.8%	10.7%	7.5%	9.3%	10.1%	12.3%
Risk set	1,142	690	451	289	158	65
Incidence	19.9%	24.4%	25.8%	27.2%	30.2%	31.3%
Obs.	1,161	886	679	482	305	144
Living apart from parents						
Hazard	1.7%	4.4%	13.0%	15.5%	15.0%	14.1%
Risk set	1,161	849	610	348	180	71
Incidence	1.7%	5.9%	17.4%	31.1%	37.4%	45.1%
Obs.	1,161	886	679	482	305	144

Note: Data for adolescents from waves 1-7 of the HILDA Survey.

Table 2. Unconditional and conditional means of financial stress, conflict, and other measures at age 15

Characteristics at age 15	initial sample at age 15	out of school at age 18?		inactive at age 18?		receive transfers at age 18?		live apart at age 18?	
		yes	no	yes	no	yes	no	yes	no
Financial stress reported by mother	0.08	0.12	0.06	0.15	0.08	0.16	0.07	0.15	0.08
Financial stress reported by adolescent	0.03	0.04	0.02	0.03	0.03	0.04	0.02	0.04	0.02
Household log income	11.17	10.98	11.22	10.75	11.14	10.73	11.21	11.01	11.10
Household received transfers	0.78	0.83	0.74	0.82	0.78	0.97	0.73	0.82	0.78
Mother unable to borrow $AUS 2000	0.24	0.30	0.20	0.44	0.23	0.47	0.18	0.39	0.23
Own home	0.79	0.73	0.85	0.55	0.82	0.62	0.85	0.68	0.81
Adolescent reports conflict w/ parents	0.04	0.04	0.04	0.04	0.04	0.05	0.04	0.05	0.04
Mother reports conflict with children	0.01	0.02	0.01	0.03	0.01	0.02	0.01	0.03	0.01
Mother reports conflict w/ fmr. spouse	0.05	0.07	0.05	0.07	0.06	0.10	0.04	0.06	0.06
Parents report conflict with each other	0.07	0.04	0.09	0.03	0.07	0.04	0.08	0.04	0.07
Lone parent household	0.19	0.22	0.18	0.27	0.19	0.38	0.14	0.26	0.19
Step-parent household	0.13	0.14	0.09	0.15	0.11	0.10	0.12	0.19	0.10
Age of youngest person in household	11.33	11.39	11.01	11.30	11.20	10.21	11.55	10.72	11.31
Number of children in household	1.10	1.08	1.24	0.99	1.18	1.34	1.10	1.12	1.16
Number of other adults in household	0.56	0.51	0.51	0.55	0.50	0.46	0.53	0.40	0.53
Female	0.50	0.48	0.55	0.54	0.50	0.61	0.47	0.51	0.51
Migrant background	0.13	0.10	0.18	0.15	0.14	0.21	0.11	0.06	0.15
Aboriginal background	0.03	0.04	0.02	0.06	0.03	0.08	0.01	0.05	0.03
Highest schooling attained by parents	5.08	4.54	5.60	4.30	5.14	4.25	5.30	4.60	5.12
Parents' occupational status	50.70	45.56	57.09	39.55	52.65	35.16	56.34	45.20	52.14
Parents' occupational status missing	0.09	0.10	0.07	0.17	0.07	0.23	0.04	0.10	0.08
Observations	1,158	362	315	89	588	173	504	118	559

Note: Data for adolescents from waves 1-7 of the HILDA Survey.

Table 3. Discrete-time hazard results with baseline variables

	Leave school	Become inactive	Receive public transfers	Live apart from parents
Household log income	-0.106*	-0.141**	-0.189***	-0.058
	(0.057)	(0.061)	(0.050)	(0.074)
Household received transfers	-0.275*	-0.038	1.583***	-0.013
	(0.143)	(0.222)	(0.283)	(0.199)
Own home	-0.080	-0.318	-0.479***	-0.837***
	(0.151)	(0.212)	(0.156)	(0.196)
Lone parent household	0.132	-0.040	0.746***	0.205
	(0.151)	(0.223)	(0.155)	(0.209)
Step-parent household	0.886***	0.698***	0.049	0.947***
	(0.176)	(0.254)	(0.221)	(0.230)
Age of youngest person in household	0.004	-0.062**	-0.023	-0.022
	(0.023)	(0.031)	(0.026)	(0.027)
Number of children in household	-0.104	-0.451***	0.032	0.046
	(0.087)	(0.148)	(0.097)	(0.116)
Number of other adults in household	0.064	-0.015	0.118	-0.213*
	(0.074)	(0.119)	(0.086)	(0.113)
Female	-0.201*	-0.097	0.206	0.359**
	(0.108)	(0.167)	(0.130)	(0.158)
Migrant background	-0.451***	0.209	0.003	-0.993***
	(0.163)	(0.229)	(0.182)	(0.278)
Aboriginal background	0.658**	1.484***	0.783**	0.127
	(0.290)	(0.329)	(0.320)	(0.376)
Highest level of schooling attained by parents	-0.071***	-0.015	0.008	0.015
	(0.027)	(0.040)	(0.032)	(0.038)
Parents' occupational status	-0.009***	-0.004	-0.021***	-0.006
	(0.003)	(0.005)	(0.004)	(0.004)
Parents do not have an occupational status	-0.164	0.323	0.176	0.037
	(0.254)	(0.348)	(0.267)	(0.337)
Observations	2,357	2,751	2,582	3,077

Note: Coefficients from discrete-time logistic hazard models estimated with data for adolescents from waves 1-7 of the HILDA Survey. Models also include dummy-variable controls for age and year. Standard errors appear in parentheses.
* Significant at .10 level. ** Significant at .05 level. *** Significant at .01 level.

Table 4. Discrete-time hazard results with financial stresses, constraints and conflicts

	Leave school	Become inactive	Receive public transfers	Live apart from parents
Financial stress reported by mother	0.601	0.969*	0.970**	-0.920
	(0.400)	(0.549)	(0.423)	(0.647)
Financial stress reported by adolescent	0.023	-0.741	0.763	1.892***
	(0.583)	(0.885)	(0.658)	(0.667)
Mother reports not being able to borrow $AUS 2000	-0.024	0.475**	0.473***	-0.190
	(0.160)	(0.228)	(0.162)	(0.241)
Adolescent reports conflict with parents	0.532**	0.397	0.140	1.299***
	(0.258)	(0.362)	(0.311)	(0.302)
Mother reports conflict with children	-0.029	-1.197	0.493	0.522
	(0.490)	(1.059)	(0.484)	(0.581)
Mother reports conflict with former spouse	-0.257	-0.699	-0.299	0.945***
	(0.271)	(0.451)	(0.276)	(0.354)
Parents report conflict with each other	-0.480*	-0.886*	-0.160	-0.656
	(0.247)	(0.524)	(0.305)	(0.445)
Household log income	-0.094	-0.126*	-0.172***	-0.074
	(0.058)	(0.066)	(0.051)	(0.072)
Household received transfers	-0.282*	-0.080	1.561***	-0.026
	(0.144)	(0.230)	(0.293)	(0.205)
Own home	-0.068	-0.213	-0.273*	-0.940***
	(0.156)	(0.222)	(0.165)	(0.212)
Lone parent household	0.104	-0.112	0.676***	-0.297
	(0.178)	(0.254)	(0.183)	(0.278)
Step-parent household	0.804***	0.539**	-0.020	0.799***
	(0.178)	(0.262)	(0.224)	(0.241)
Age of youngest person in household	0.009	-0.060*	-0.023	-0.021
	(0.023)	(0.032)	(0.027)	(0.029)
Number of children in household	-0.090	-0.452***	-0.004	0.048
	(0.088)	(0.147)	(0.099)	(0.122)
Number of other adults in household	0.076	0.030	0.116	-0.198*
	(0.075)	(0.121)	(0.087)	(0.116)
Female	-0.209*	-0.092	0.188	0.358**
	(0.109)	(0.172)	(0.134)	(0.164)
Migrant background	-0.496***	0.132	0.091	-1.062***
	(0.167)	(0.238)	(0.185)	(0.298)
Aboriginal background	0.627**	1.274***	0.822**	0.207
	(0.295)	(0.353)	(0.329)	(0.427)
Highest level of schooling attained by parents	-0.078***	-0.035	-0.002	0.003
	(0.027)	(0.042)	(0.033)	(0.040)

Parents' occupational status	-0.008***	-0.001	-0.019***	-0.006
	(0.003)	(0.005)	(0.004)	(0.005)
Parents do not have an occupational status	-0.227	0.305	0.180	-0.037
	(0.261)	(0.359)	(0.275)	(0.362)
Observations	2,325	2,702	2,545	3,012

Note: Coefficients from discrete-time logistic hazard models estimated with data for adolescents from waves 1-7 of the HILDA Survey. Standard errors appear in parentheses.
* Significant at .10 level. ** Significant at .05 level. *** Significant at .01 level.

Table 5. Discrete-time hazard results of alternative nest-leaving transitions

	Live apart from parents	Live apart and leave school	Live apart and leave school with < 12 years of school	Live apart and leave school before age 18
Financial stress reported by mother	-0.920	-0.405	-0.115	-1.424
	(0.647)	(0.766)	(1.155)	(1.670)
Financial stress reported by adolescent	1.892***	2.061***	1.318	1.552
	(0.667)	(0.757)	(1.244)	(1.583)
Mother reports not being able to borrow $AUS 2000	-0.190	-0.414	-0.704	-0.151
	(0.241)	(0.300)	(0.459)	(0.581)
Adolescent reports conflict with parents	1.299***	1.375***	1.529***	1.106
	(0.302)	(0.343)	(0.485)	(0.675)
Mother reports conflict with children	0.522	1.085*	1.880**	1.158
	(0.581)	(0.607)	(0.842)	(1.167)
Mother reports conflict with former spouse	0.945***	0.706	1.179*	-0.024
	(0.354)	(0.437)	(0.662)	(1.158)
Parents report conflict with each other	-0.656	-1.559**		
	(0.445)	(0.747)		
Household log income	-0.074	-0.032	-0.031	-0.121
	(0.072)	(0.099)	(0.219)	(0.244)
Household received transfers	-0.026	-0.146	-0.057	0.278
	(0.205)	(0.243)	(0.422)	(0.608)
Own home	-0.940***	-0.605**	-0.737*	-0.812*
	(0.212)	(0.259)	(0.414)	(0.493)
Lone parent household	-0.297	-0.397	-0.640	-0.838
	(0.278)	(0.335)	(0.548)	(0.658)
Step-parent household	0.799***	0.915***	1.018**	0.426
	(0.241)	(0.279)	(0.436)	(0.566)
Age of youngest person in household	-0.021	-0.039	-0.043	-0.049
	(0.029)	(0.034)	(0.056)	(0.079)
Number of children in household	0.048	-0.106	-0.216	-0.464
	(0.122)	(0.159)	(0.284)	(0.359)
Number of other adults in household	-0.198*	-0.101	0.073	-0.075
	(0.116)	(0.138)	(0.218)	(0.287)
Female	0.358**	0.366*	0.237	0.210
	(0.164)	(0.198)	(0.328)	(0.406)
Migrant background	-1.062***	-0.819**	-0.904	-1.630
	(0.298)	(0.346)	(0.641)	(1.040)
Aboriginal background	0.207	0.733	0.889	1.062
	(0.427)	(0.457)	(0.636)	(0.732)

Highest level of schooling attained by parents	0.003	-0.040	-0.012	-0.033
	(0.040)	(0.047)	(0.077)	(0.101)
Parents' occupational status	-0.006	-0.014**	-0.019**	-0.011
	(0.005)	(0.005)	(0.009)	(0.011)
Parents do not have an occupational status	-0.037	-0.174	-0.567	-0.377
	(0.362)	(0.423)	(0.610)	(0.824)
Observations	3,012	2,820	1,751	1,631

Note: Coefficients from discrete-time logistic hazard models estimated with data for adolescents from waves 1-7 of the HILDA Survey. Standard errors appear in parentheses.
* Significant at .10 level. ** Significant at .05 level. *** Significant at .01 level.