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UNIVERSITY OF MINNESOTA

Working Paper Series

“Roommates or Families? Access to Housing and the Transition to Non-Marital Cohabitation in Sweden.”

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Working Paper No. 2005-02
<https://doi.org/10.18128/MPC2005-02>

Abstract

Some researchers suggest that non-marital cohabitants behave like a subcategory of roommates, while others find non-marital cohabitants behave like new families. If non-marital cohabitants behave like roommates, then more access to housing would make young adults more likely to remain single. If non-marital cohabitants behave like families, then more access to housing would make young adults more likely to cohabit. In this paper I directly test these two competing hypotheses with life course data from the Swedish Family Survey of 1992. I find that better access to housing significantly increases the likelihood of entering non-marital cohabitation and for men, those entering non-marital cohabitation in Sweden are increasingly behaving like new families rather than roommates over time.

KEYWORDS

Housing, Cohabitation, Sweden, Family Formation, Roommates

Non-marital cohabitation, or living together, is fundamentally organized around sharing housing. Indeed, the defining characteristic of cohabitation is the sharing of living space. The other defining characteristic of non-marital cohabitation involves some sort of sexual relationship, and possibly an implied degree of commitment between cohabitants (Forste & Tanfer 1996). Researchers may agree on these two fundamental characteristics of non-marital cohabitation. However, the relative weight of these two characteristics in defining non-marital cohabitation remains subject to intense debate within the sociological and demographic community (Rindfuss & VandenHeuvel 1990, Bumpass, et al 1991, Manting 1996). Should non-marital cohabitants be considered primarily a sub-category of roommates who share a sexual relationship? Should non-marital cohabitants be considered, instead, a sub-category of family, merely without the formal bonds of marriage? Is the meaning of non-marital cohabitation changing over time?

Where other researchers primarily define non-marital cohabitation through consideration of the degree of sexual commitment between non-marital cohabitants (Forste & Tanfer 1996), I focus here on how and when cohabitants decide to share living space. In particular, I reframe questions attempting to define non-marital cohabitation in terms of how new cohabitants behave with respect to the housing market. Do they behave primarily as new roommates, moving in together in response to high housing costs and scarcity? Do they instead behave like new families, moving in together only when housing costs are low and adequate family housing becomes readily available? Does the relationship between entrance into non-marital cohabitation and housing change over time? I attempt to answer these questions by modeling the relationship between access to housing and the transition to non-marital cohabitation for young adults living on their own in Sweden.

ROOMMATES OR FAMILIES?

Rindfuss and VandenHeuvel (1990) make the most concise case for considering young non-marital cohabitants a sub-category of roommates. In conjunction with subsequent research, they argue that individuals in non-marital cohabiting relationships share far more in common with single, or dating adults than with married couples (Rindfuss & VandenHeuvel 1990, Forste & Tanfer 1996). Chevan (1996) makes a similar case for older adults, focusing on the economic advantages relative to remaining in a single person household. Other researchers point out that cohabitation carries significantly less symbolic commitment than marriage (Bumpass, et al 1991). Non-marital cohabitation involves substantially fewer sacrifices of privacy and autonomy than marriage. Without the threat of ‘enforceable trust’, cohabitation seems to provide greater freedom for individuals (Cherlin 2000, Ross 1991). As such, it may prove a particularly desirable arrangement for those faced with the chaos of young adulthood (Rindfuss 1995). Having a roommate reduces the costs of living alone and the difficulty in finding and keeping housing, especially for the poor (Chevan 1996). In turn, the poor and economically unstable are frequently theorized as leading the entrance into non-marital cohabitation (Trost 1978, Smock & Manning 1997, Clarkberg 1999, Kiernan 2000).

If non-marital cohabitants are primarily a sexually active sub-category of roommates, then access to housing is likely to influence entrance into non-marital cohabitation. Mutchler and Krivo (1989) report increases in household complexity and a greater incidence of non-nuclear family arrangements when housing markets tighten. When housing is difficult to find and expensive, single adults will be more likely to live together, cohabiting as a response to competitive housing conditions. Correspondingly, when housing is readily available and cheap

relative to income, single adults will be less likely to resort to living together (Mutchler & Krivo 1989, Chevan 1996).

Other researchers make the case for considering non-marital cohabitants a sub-category of family (Lewin 1982, Bumpass, et al 1991). They point towards the role of non-marital cohabitation as a precursor or equivalent alternative to marriage. In many cases non-marital cohabitation serves as a “trial” marriage, allowing partners to gather information about one another and make the final decision to commit (Bumpass, et al 1991, Oppenheimer 1994, Cherlin 2000). In other cases, non-marital cohabitants consider themselves fully committed to one another, but avoid marriage as overly patriarchal or an institutional intrusion on a private relationship (Bumpass, et al 1991, Waite 2000, Bernhardt 2001). The rise in childbearing in non-marital cohabiting unions also seems to support the view that these unions represent an alternative and conscious type of family formation (Bumpass, et al 1991, Bumpass & Lu 2000). However, the high rates of dissolution in non-marital cohabiting unions and the possibility that childbearing results more from unintended pregnancies, within or before entering non-marital cohabitation, than from conscious family planning indicate that caution is warranted in adopting this interpretation (Bumpass & Lu 2000, Raley 2001).

Marriage in historical Northwestern Europe, and later North America has long been associated with the establishment of a new household (Hajnal 1965, 1982). Research supports the continued importance of obtaining quality housing as a cultural symbol of preparedness for family formation in these contexts. Features such as housing location, size, and tenancy, for instance, signify status (Dowling 1998, Glazer 1967), and values (Coolen & Hoekstra 2001, Hiscock, et al 2001). More importantly, these attributes of housing signify preparation for family formation (Mulder & Wagner 1998, 2001, Clark, Deurloo, and Dieleman 1997). Quality

family housing tends to mean location in a good neighborhood, room enough for two or more, and often ownership (Myers 1990). Housing serves as both the site of social reproduction, and a significant symbol of social status. Hence obtaining status-appropriate, quality housing indicates preparedness for family formation (Hiscock, et al 2001, Dowling 1998, Rowlands & Gurney 2001, Hughes 2003).

If non-marital cohabitation serves as a precursor or alternative equivalent to marriage, non-marital cohabitation is likely to require substantively similar material preparation. In this case, access to quality housing is likely to have the opposite relationship to forming a non-marital cohabitation than if cohabitants behave primarily like roommates. When quality housing is readily available and cheap relative to income, single adults will be more likely to move in together. When quality housing is difficult to find and expensive, single adults will be more likely to remain alone, waiting until a more opportune time to begin a family.

THE SWEDISH TEST

Depending upon whether those entering non-marital cohabitations behave primarily as roommates or primarily as families, the relationship between entrance into non-marital cohabitation and access to housing is likely to differ dramatically. In the first instance, considered as roommates, singles are more likely to enter non-marital cohabitation as housing becomes more difficult to obtain. In the second instance, considered as families, singles are less likely to enter non-marital cohabitation as housing, particularly quality housing, becomes more difficult to obtain.

I choose Sweden as an ideal location to test these competing hypotheses, both for Sweden’s theoretical relevance as a case study, and for the availability and quality of data in Sweden. Sweden has perhaps the longest well-documented history of non-marital cohabitation of any European or North American country (Trost 1978, Matovic 1990). Sweden is also viewed as a trendsetter in this regard, predicting future trends in non-marital cohabitation for other countries (Kiernan 2000).

The literature suggests the relevance of competing definitions of non-marital cohabitation to Swedish history. Historical studies demonstrate a pattern of rising non-marital cohabitation in response to housing shortages in Stockholm from as far back as the late 19th Century (Matovic 1984, 1990). Popenoe argues that the high proportion of young Swedes living alone in the 1970s is directly related to the vast increase in housing options available during that time period (Popenoe 1987). Here non-marital cohabitation is viewed as a response to housing shortages, implying the dominance of a roommate definition. Yet the slang term historically given to non-marital cohabitation, *Stockholmäkenskap*, or “Stockholm Marriage” also implies an equivalence, of sorts, with marriage (Matovic 1990). Many researchers in Sweden consider non-marital cohabiting couples distinctly new forms of family (Trost 1975, 1978, Lewin 1982). Moreover, Sweden lies well within the cultural and historical bounds of the Northwestern European family formation system linking family formation to the ability to form an independent household (Hajnal 1965, Håkanson 1999, Matovic 1984, 1990). As a result, Sweden should provide an ideal location to test whether those entering non-marital cohabitations are more likely to behave like roommates or families with respect to the housing market.

Swedish data sources also provide excellent data for modeling. To measure household formation behavior, I use the Swedish Family Survey of 1992 (SFS 92). The Swedish Family

Survey provides detailed information for five cohorts of women (1949, 1954, 1959, 1964, and 1969) and three cohorts of men (1949, 1959, 1964). In total, the data can be used to construct life histories for some 4,984 respondents. The data include information on the timing of leaving home, entry into cohabiting unions and entry into marital unions, the primary dependent variables of interest. The data also include information on control variables of interest, including timing of childbearing, timing of employment, timing of education, parental religiosity, parental occupation, and immigrant status. Each of these variables may in some way influence both access to housing and likelihood of entering a non-marital cohabitation.

A supplemental data file was constructed for the Swedish Family Survey using data from the Swedish tax registry. Tax registry data provides information about the income of respondents and their location as recorded during the month of November for each year from 1968 until 1992. Tax registry data is attached to each person-year from the original survey, providing time-varying information about income and location.

By attaching individual person-years to location, I am able to assess their local access to housing on the basis of official records. Statistics Sweden, the central bureau for statistics collections in Sweden, provides data useful to construct local housing market measures. For each of twenty-one län, an administrative unit of size and function similar to counties in the United States (Nilsson & Strandh 1999), Statistics Sweden provides data on population by sex and age and new dwellings built by detached or multi-dwelling house type (Statistics Sweden 2002). This data is available for all years between 1968 and 1992. Total number of dwellings for each län are available in Statistics Sweden for the census years 1975-1990. Data on average housing prices by län are available in the *Statistiska årsbok* (Statistics Sweden 2002) for all years 1976-1992. Similar data for the nation are available from 1973-1992, and average rental rates

are available from 1970-1992. Interest rates and price indices (measuring inflation) are available for the nation for all years from 1968-1992. From the years provided, I estimate data for missing years between 1968 and 1992.

I combine the Swedish Family Survey dataset with tax records and official real estate and registry records to construct the combined SFS 92 dataset. Advantages of the combined SFS 92 dataset include its representativeness across Sweden, including respondents from all major län (here treated as real estate markets), and its detailed life history for each respondent, providing for yearly estimates of risks of transition (Bracher & Santow 1998). The cohort structure of the survey also allows for tests of a change in relationships between cohorts.

METHODS

To test my hypotheses, I am interested in measuring the relationship between access to housing and entrance into first cohabitation. Here I confine myself to examining transitions to first cohabitation for those living on their own as opposed to those living at home with their parents. I make this distinction because those living on their own face qualitatively different housing pressures than those living at home. Moreover, while a significant minority of Swedes leave their parental households to begin non-marital cohabitations, the majority of Swedes (over 61% for women and 65% for men) enter non-marital cohabitation from living on their own (author citation). In other work, I directly study the relationship between access to housing and entrance into non-marital cohabitation for those leaving home in Sweden (author citation). Similarly, very few Swedes marry directly without first cohabiting (only 5.5% and 6.7% for men), so I ignore marriage as a competing risk here (author citation).

To measure the impact of access to housing on likelihood of non-marital cohabitation for those living on their own, I employ a binomial logistic discrete-time event history model. I run separate models for men and women. Individuals enter this model upon leaving their parental home to live alone. From there, I measure their risk of entering into a non-marital cohabiting partnership for each person-year. Individuals who remain single at the time of the survey, or past age 35, are censored from the model at that point, as are the very few individuals in the sample who marry directly without first cohabiting. To obtain a baseline risk level for each discrete person-year, each age is provided a different basic risk estimated in the model up until age 30 (Yamaguichi 1991, Bracher & Santow 1998). Remaining years are grouped together up until age 35, when those respondents still single are censored from the model. [I further control for the unmeasured aspects of län \(real estate markets\) on risk of entry into non-marital cohabitation by introducing fixed effects for län into the model.](#) Since person-years comprise the unit of analysis in the model, I estimate the model robustly, allowing errors to correlate (cluster) at the person level. Alternative methods of estimating error structures provide substantively similar results. For any given person-year, the model described above can be used to estimate the risk of entering a cohabiting partnership for those living on their own. By estimating this risk with respect to measures of access to housing, I am able to test the competing hypotheses predicted by the roommate and family hypotheses.

[To measure access to housing in these models, I employ three measurements. The first two measurements concern infrastructural access to housing, and are measured at the län-year \(county-year\) level. The third measurement concerns financial access, and combines individual level variables with län and national level variables.](#)

I measure infrastructural availability of housing by considering the housing growth rate. While the roommate hypothesis is concerned with access to housing in general, the family hypothesis is concerned specifically with access to quality housing. Hence I divide the housing growth rate into two components, the apartment growth rate, and the detached house growth rate, in order to control for the quality of housing (Dowling 1998). If those entering non-marital cohabitation behave like new families, then the growth of detached dwellings (single family homes) represents an increase in access to quality housing (Coolen & Hoekstra 2001, Hiscock, et al 2001), and is likely to lead to a rise in the likelihood of non-marital cohabitation. By contrast, growth in multi-unit apartment dwellings may represent an increase in low quality housing, of the sort more suitable for single adults (Rowlands & Gurney 2001). If non-marital cohabitants act more like roommates than families, then the growth of apartments and single-family dwellings will both lead to more people choosing to live alone rather than share with a live-in partner.

I measure financial access to housing as a function of the ratio between an individual's reported income and an estimate of housing costs. Housing costs are derived from a combination of average yearly house sale price in a län, average yearly interest rates, and average yearly rent. High ratios indicate greater financial access to housing. Low ratios indicate less financial access. It should be noted that I choose this interactive construction of the variable as the best measurement for examining differences in individual access to housing. I reject alternative constructions of this variable, including disaggregating the variable to model the effects of income and housing costs separately, as less theoretically sound since they decontextualize individual income from local housing conditions. However, models including both income and

housing costs as separate variables support the significance of both variables, and remain otherwise substantively similar to the models reported below.

Along with controlling for age, I also add controls for cohort of birth, following the structure of the survey and measuring the possibility of change over time (Bracher & Santow 1998). I include a measurement of Nordic origin to separate out immigrants who may possess differing orientations towards non-marital cohabitation than the mainstream Scandinavian population as well as differing access to housing (Trost 1975, Abramsson, et al 2002). Parental status and religiosity may decrease acceptance of non-marital cohabitation as well as influence access to housing (Trost 1975, Bracher & Santow 1998, Bernhardt 2002). Completing education degrees may result in both increased access to resources, and differing orientation towards non-marital cohabitation (Thornton, et al 1995, Bracher & Santow 1998). Current status, including status as student or employee, and status with respect to military service, can also influence both resources and attitudes, and may imply a degree of role conflict with entrance into family formation (Hogan 1978, Rindfuss 1995, Thornton, et al 1995). Pregnancy and the presence of children are particularly likely to increase entrance into non-marital cohabitation and may also influence access to housing in Sweden (Bracher & Santow 1998, Brien, et al 1999, Bumpass & Lu 2000, author citation). Finally, the availability of possible partners can also influence entrance into non-marital cohabitation (South & Lloyd 1992). Summaries of controls and housing measurements with are provided in table one below.

<Table One About Here>

I employ three measures of access to housing to test my hypotheses of interest. According to the theory that unmarried cohabitants behave like roommates, moving in together primarily in response to tight housing markets, I hypothesize that access to housing is negatively

related to entering a non-marital cohabiting partnership. According to the theory that unmarried cohabitants behave like newly forming families in the housing market, I hypothesize that access to quality housing is positively related to entering a non-marital cohabiting partnership. To examine change in the relationship between access to housing and entrance into non-marital cohabitation over time, I run an additional model with an interactive term for housing variables with the youngest cohorts (born in 1964 and 1969).

RESULTS

Chart one demonstrates the basic relationship between the years since young adults left home to live alone and their entry into non-marital cohabitation. Women are more likely to enter a non-marital cohabitation than men at all years since leaving the parental home. Well over a quarter of women form cohabiting relationships within two years of leaving home to live alone. Approximately half of women cohabit with a partner within three years of leaving the parental home to live alone. By six years from leaving home, more than three quarters form a cohabiting relationship. Men tend to live on their own for longer periods of time. A little over a quarter of men cohabit within two years of leaving home. Approximately half enter a cohabiting relationship within four years of leaving the parental home. Over three quarters cohabit within eight years of leaving home to live alone.

<Chart One About Here>

The first model I run, in table two, column A, demonstrates the basic relationships between control variables and the risks of entering a partnership from living alone. The first variable employed measures the time-dependence of the risk of entrance into a partnership from

leaving the parental home. Controlling for other factors, the risk is significantly lowered for entering a cohabiting partnership within the first year after leaving home relative to those having left for five years or more. These reduced risks may reflect a decrease in the value placed in independence shortly after leaving the parental home to live alone.

The relationship between age and entrance into cohabiting partnerships is largely as expected within the literature (Bracher & Santow 1998). Teenagers living on their own are significantly less likely to enter into a cohabiting relationship than those age 23 (the comparison group). After age 23, the relationship between age and partnering is negative and significant, so that those living on their own past this “normative” age are more likely to remain that way for longer.

The model indicates no significant difference between the first cohort and later cohorts. Controlling for other variables, the historical likelihood of entering a non-marital cohabiting relationship does not seem to have changed significantly over time. Background variables also demonstrate significant effects on the risk of partnering. Being a non-Scandinavian immigrant seems to significantly increase the likelihood of entering a non-marital cohabiting relationship for women, an unusual finding of interest here since non-marital cohabitation is frequently deemed a culturally Scandinavian behavior (Trost 1975, Popenoe 1987). Parental status as measured by occupation type seems to matter little. Having religious parents, on the other hand, significantly reduces the risk of entering a cohabiting partnership for women. Those with religious parents may be less likely to view non-marital cohabitation as acceptable (Bracher & Santow 1998, Brien, et al 1999).

Time-varying controls also seem to have relatively few significant effects. Completing a university education significantly increases the risk of partnership, though being a student does

not. Completing other degrees also fails to boost likelihood of cohabitation. The boost in non-marital cohabitation from receiving a university degree may be due to the improved economic opportunities a degree affords, providing support for the idea that non-marital cohabitation is not simply an alternative for those without opportunity in Sweden (Thornton, et al 1995, Bracher & Santow 1998).

Pregnancy greatly increases the risk of entering a non-marital cohabitation for women in Sweden. Pregnancy frequently leads to non-marital cohabitation in Sweden (Bracher & Santow 1998). Nevertheless, as evident from summary statistics, relatively few couples experience pregnancy prior to entrance into cohabitation, less than 5% for both men and women. The effect of pregnancy may differ from the effect of children already born, insignificant in this model, since the independence of the mother from the father is already established in the latter case (Bernhardt & Goldscheider 2002). Other control variables, including employment status, school status, and sex ratio, have no discernible effect on entrance into non-marital cohabitation for women in Sweden in these models.

Table two, column B re-estimates the model including measurements of access to housing. Coefficients for control variables remain largely the same in this model. The apartment growth rate, representing access to lower quality housing, has no significant effect on entrance into non-marital cohabitation. However, the detached house growth rate, representing access to quality housing, significantly increases the likelihood of non-marital cohabitation. This provides support for the hypothesis that non-marital cohabitants act like new families. The variable measuring financial access to housing, the ratio of income to housing costs, has a highly significant positive effect on entrance into cohabiting unions, providing further support for the this hypothesis. Contradicting the roommate hypothesis, individuals living on their own seem to

prefer family formation when quality housing becomes available and more affordable. As demonstrated in the likelihood ratio test comparing models A and B, the addition of housing variables significantly improves the overall model.

<Table Two About Here>

I turn to modeling the same risks for men in table three. The first model I propose, again, is the control model, in column A. The first variables, measuring the time-dependence of entrance into cohabitation from leaving home, mirror estimates for women, though they prove insignificant for men.

The relationships between partnership and age are again similar to the model for women, but less significant. Those age 18 through 20 are significantly less likely to partner than those age 23 (men living alone at age 17 are ultimately dropped in this model since none entered into non-marital cohabiting relationships). Yet there are no significantly negative effects of aging until ages 30 and above. This seems to reflect a longer period of relatively normative partnering for men compared to women. As with women, there are no significant differences between birth cohorts for men. The only significant background variable effect for men is a decreased likelihood of entering a non-marital cohabitation if both parents were present during their childhood. Axxin & Thornton (1996) find similar results for the U.S., though the gender differences between men and women are intriguing here.

With respect to time-varying variables, completed education fails to have a significant effect on risk of partnership for those men living alone. As with women, experiencing a pregnancy (in this case a sexual partner’s pregnancy) sharply increases risk of partnership. Yet for men, employment is also an important factor. Being unemployed or only part-time employed has a significant negative effect on entrance into non-marital cohabitation for men. Employment

status may be more of an indicator of preparedness for non-marital cohabitation for men than for women, where completing university education serves a similar function (Hogan 1978, Oppenheimer 1994). There are no other significant effects of control variables on the risk of entering a partnership for men living alone.

In table three, column B, I add in the housing variables for men. The addition of housing variables to the model changes little with respect to estimates of control variable effects. [Here the apartment growth rate has a significant and negative influence on entrance into non-marital cohabitation, but the detached house growth rate fails to demonstrate any significant effect. Only the addition of lower quality housing to the market, not higher quality housing, significantly reduces the likelihood that men will become new non-marital cohabitants.](#) As for women, the measurement of financial access to housing, the ratio of income to housing costs, is also significant for men. The greater the affordability of housing, the more likely it becomes for single men to move into a cohabiting partnership. Again, the addition of housing variables significantly improves the model for men.

<Table Three About Here>

[For men, increased infrastructural access to low quality housing decreases the likelihood of entrance into non-marital cohabitation, but there is no correspondingly significant decrease in non-marital cohabitation due to increases in access to higher quality housing. This provides limited support for the hypothesis that men entering non-marital cohabitation behave like roommates, but only where this hypothesis fails to contradict the family hypothesis. Furthermore, greater financial access to housing significantly increases the risk that men will begin a non-marital cohabitation. Overall, the theory that non-marital cohabitants behave like families receives empirical support when applied to housing for men. Obtaining financial access](#)

to housing seems to be a key part of the process to forming a family. Low quality, but not high quality additions to the housing supply decrease the likelihood of entering non-marital cohabitation.

I return to modeling to obtain an estimate for the significance of change over time in the relationships between access to housing and entrance into non-marital cohabitation. In model C, for both women (table two) and men (table three), I use interactions to estimate changes in the effects of housing variables for the youngest cohorts. The resulting coefficients provide an estimate of recent change in the relationship between access to housing and entrance into non-marital cohabitation. For women, the interactive model remains substantively similar to the housing model. None of the interactive terms achieve significance in the model, and inclusion of interactive terms fails to significantly improve the model. The relationship between access to housing and entrance into non-marital cohabitation shows no evidence of significant change over time, indicating that women entering into non-marital cohabitation continue to act primarily like they are forming new families.

For men, the interactive model does provide a significant result. The youngest cohort of men demonstrates a significant change relative to older cohorts in the relationship between financial access to housing and entrance into non-marital cohabitation. The relationship between financial access to housing and entrance into non-marital cohabitation proves increasingly positive. The results remain insignificant with respect to change over time for the effects of infrastructural access to housing on entrance into non-marital cohabitation. Young men entering into non-marital cohabitation behave increasingly like new families, and decreasingly like roommates over time, at least with respect to financial access to housing. The addition of interactive terms only marginally ($p < 0.10$) improves the model for men.

CONCLUSION

For both men and women, the transition from living alone to entering a non-married, cohabiting partnership in Sweden is significantly influenced by access to housing. Entrance into non-marital cohabitation is facilitated by greater access to quality housing, supporting the theory that those forming non-marital cohabiting unions behave more like new families than new roommates. Obtaining access to quality housing seems to serve as an important component of establishing preparedness for non-marital cohabitation, much as it does for marriage. Other research in Sweden reveals a similar relationship between entrance into non-marital cohabitation and access to housing for those leaving the parental home. Those living in their parental household with greater access to housing are more likely to leave to begin a cohabiting partnership when they leave home relative to leaving home to live on their own (author citation).

The competing theory that those entering non-marital cohabitations behave like a subcategory of roommates (Rindfuss & VandenHeuvel 1990, Forste & Tanfer 1996) receives support only for men, and only where it fails to contradict the competing theory that non-marital cohabitants behave like new families (Chevan 1996). Those with greater financial access to housing are more likely to move in together than those with less financial access to housing for both men and women. For men, the addition of low quality housing to the market reduces their likelihood of entrance into non-marital cohabitation, but there is no similarly significant negative effect for the addition of high quality housing. For women, the addition of high quality housing significantly increases the likelihood of entrance into non-marital cohabitation.

I include interactive models to explore change over time in the relationship between access to housing and entrance into non-marital cohabitation. I detect no significant change from the familial orientation of non-marital cohabitation for women. With respect to financial access to housing, the trend is for men to act increasingly like families and decreasingly like roommates. This supports the notion that the behavior of men entering non-marital cohabitation has changed in Sweden, becoming increasingly familial over time (Manting 1996, Murphy 2000). Initial hypotheses and results are demonstrated in table four.

<Table Four About Here>

The implications of these findings are likely to extend outside of Sweden. As non-marital cohabitation gains in popularity in other countries, it may also become increasingly associated with the family formation process (Manting 1996, Murphy 2000). In particular, those countries where housing has historically served as a prerequisite to family formation (particularly in Northwestern Europe and North America) are likely to demonstrate the same patterns as Sweden. [Changes in access to quality housing may significantly influence trends in non-marital cohabitation in these places, likely in a similar fashion to the way changes in access to quality housing influence trends in marriage \(Hughes 2003\).](#)

Nevertheless, aspects of the generous Swedish welfare state and Sweden’s long history with non-marital cohabitation may result in a qualitatively different cultural understanding of what non-marital cohabitation means in Sweden relative to other contexts. Furthermore, shifts in the behavior of non-marital cohabiting couples in Northwestern Europe, and the meaning of cohabitation itself, may not be mirrored by similar shifts in North America (Manting 1996, Raley 2001). More comparative research is needed to help understand the changing meaning of non-

marital cohabitation. Further exploring the behavior of non-marital cohabitants within the housing market is likely to provide important insights into this process.

Table 1. Variable Summaries for Person-Years from Leaving Home Alone to Entry into First Non-Marital Cohabitation.

Variables	Women		Men		Low	High	
	Mean	Std. Dev.	Mean	Std. Dev.			
Left Home	0-1 years	0.21	0.41	0.17	0.38	0	1
	2-4 years	0.44	0.50	0.41	0.49	0	1
	5 or more years	0.34	0.47	0.41	0.49	0	1
	Average Years	4.19	3.36	4.53	3.25		
Age	Age	23.25	3.75	24.49	3.74	17	35
Cohort	born 1949	0.18	0.38	0.38	0.49	0	1
	born 1954	0.23	0.42	n.a.	n.a.	0	1
	born 1959	0.23	0.42	0.25	0.44	0	1
	born 1964	0.21	0.41	0.36	0.48	0	1
	born 1969	0.15	0.36	n.a.	n.a.	0	1
Background Controls	Immigrant	0.00	0.06	0.01	0.07	0	1
	Both Parents Present	0.81	0.39	0.84	0.37	0	1
	Parents Religious	0.17	0.38	0.15	0.36	0	1
	Parents Blue Collar	0.32	0.47	0.39	0.49	0	1
	Parents White Collar	0.55	0.50	0.51	0.50	0	1
	Parents Other	0.12	0.33	0.10	0.30	0	1
	Secondary Degree	0.72	0.45	0.72	0.45	0	1
	University Degree	0.03	0.18	0.04	0.19	0	1
	Technical Degree	0.09	0.28	0.06	0.24	0	1
Time-Varying Controls	Pregnant (expect)	0.03	0.18	0.02	0.14	0	1
	Children	0.07	0.34	0.03	0.22	0	4
	Sex Ratio	105.14	3.50	94.99	3.14	88.31	113.24
	Lower Student	0.08	0.27	0.04	0.21	0	1
	Upper Student	0.29	0.45	0.23	0.42	0	1
	Emp. Full-Time	0.60	0.49	0.67	0.47	0	1
	Emp. Part-Time	0.09	0.28	0.03	0.18	0	1
	Unemployed	0.32	0.47	0.29	0.45	0	1
	Military Service			0.13	0.34	0	1
Housing Access	Apartment Growth Rate	1.00	1.45	1.10	1.55	-4.77	7.00
	Detached House Growth Rate	1.98	1.10	1.94	1.18	-1.13	6.18
	Income to Housing Cost Ratio	6.67	5.66	8.84	7.63	0.00	98.15
Partner Status	% years Single	81.23		84.44			
	% years Partnered	18.77		15.56			
Observations	Person-Years	7726		4956			
	Persons	1814		986			
	Avg. Yrs. per Person	4.3		5			

Chart 1. Percent of Men and Women Still Single by Years Since Left Home

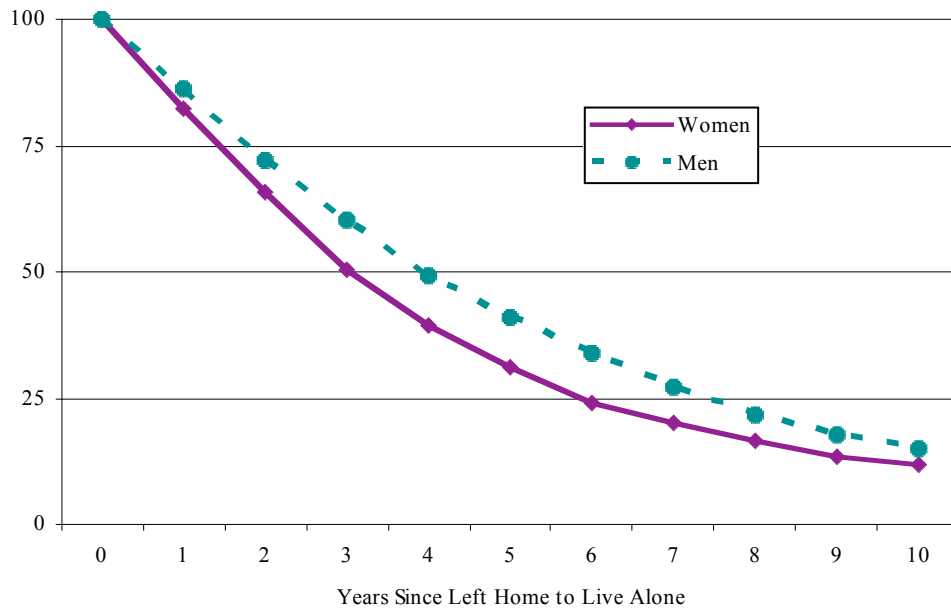


Table 2. Model Results Women: Risk of First Non-Marital Cohabitation

Variable	A. Control Model		B. Housing Model		C. Interactive Model	
	Coeff.	Signif.	Coeff.	Signif.	Coeff.	Signif.
Left Home	0-1 years	-0.32 *	-0.30 **	-0.31 **		
	2-4 years	-0.17	-0.17	-0.17		
	5 + years (reference)					
Age	age 17	-0.84 **	-0.80 **	-0.79 *		
	age 18	-0.71 ***	-0.68 ***	-0.67 **		
	age 19	-0.32 *	-0.31 *	-0.30		
	age 20	-0.18	-0.19	-0.19		
	age 21	-0.10	-0.11	-0.11		
	age 22	-0.08	-0.08	-0.08		
	age 23 (reference)					
	age 24	-0.45 ***	-0.46 ***	-0.46 ***		
	age 25	-0.40 **	-0.42 **	-0.42 **		
	age 26	-0.57 ***	-0.58 ***	-0.58 ***		
	age 27	-0.49 **	-0.46 *	-0.46 *		
	age 28	-0.92 ***	-0.87 ***	-0.86 ***		
	age 29	-0.73 ***	-0.65 **	-0.65 **		
	age 30-35	-1.50 ***	-1.37 ***	-1.37 ***		
Cohort	born 1949 (reference)					
	born 1954	-0.13	-0.04	-0.05		
	born 1959	-0.12	0.06	0.06		
	born 1964	-0.13	0.14	0.16		
	born 1969	0.08	0.40 *	0.42		
Background Controls	Immigrant	0.54 *	0.57 *	0.58 *		
	Both Parents Present	-0.04	-0.03	-0.03		
	Parents Religious	-0.47 ***	-0.46 ***	-0.46 ***		
	Parents Blue Collar (reference)					
	Parents White Collar	-0.13	-0.12	-0.11		
Time-Varying Controls	Parents Other	-0.18	-0.18	-0.17		
	Secondary Degree	-0.12	-0.12	-0.13		
	University Degree	0.48 **	0.45 **	0.45 **		
	Technical Degree	0.08	0.06	0.06		
	Pregnant (expect)	2.26 ***	2.26 ***	2.26 ***		
	Children	-0.09	-0.06	-0.06		
	Sex Ratio (100xM/W)	0.02	0.01	0.01		
	Lower Student	-0.06	0.01	0.01		
	Upper Student	-0.13	-0.05	-0.04		
	Emp. Full-Time (reference)					
Emp. Part-Time	-0.05	-0.01	-0.01			
Unemployed	-0.10	-0.00	-0.00			
Housing Access	Apartment Growth Rate		-0.01	-0.01		
	Detached House Growth Rate		0.08 *	0.09 *		
	Income to Housing Cost Ratio		0.03 ***	0.03 ***		
	Apartment Growth Rate x born 1964+			-0.01		
	Detached House Growth Rate x born 1964+			-0.04		
	Income to Housing Cost Ratio x born 1964+			0.01		
	Constant	-2.61	-2.74	-2.58		

Wald χ^2 (df)	468.5 (54) ***	486.1 (57) ***	488.1 (60) ***
Likelihood ratio χ^2 (df) <i>nested model</i>		16.9 (3) ***	0.4 (3)
Note on Coefficient Significance: * = $p \leq 0.05$. ** = $p \leq 0.01$. *** = $p \leq 0.001$.			

Table 3. Model Results Men: Risk of First Non-Marital Cohabitation

Variable	A. Control Model Coeff. Signif.	B. Housing Model Coeff. Signif.	C. Interactive Model Coeff. Signif.	
Left Home	0-1 years	-0.18	-0.19	-0.20
	2-4 years	-0.12	-0.12	-0.13
	5 + years (reference)			
Age	age 18	-1.05 *	-0.98 *	-0.91 *
	age 19	-0.52	-0.48	-0.43
	age 20	-0.61 **	-0.58 **	-0.56 *
	age 21	-0.12	-0.09	-0.06
	age 22	0.09	0.11	0.13
	age 23 (reference)			
	age 24	0.05	0.00	-0.01
	age 25	0.09	0.04	0.01
	age 26	0.02	-0.05	-0.09
	age 27	-0.23	-0.30	-0.32
	age 28	-0.25	-0.35	-0.37
	age 29	-0.35	-0.44	-0.46
Cohort	age 30-35	-0.88 ***	-0.97 ***	-1.00 ***
	born 1949 (reference)			
	born 1959	0.01	-0.09	-0.15
Background Controls	born 1964	0.09	-0.02	-0.48
	Immigrant	-0.81	-0.86	-0.83
	Both Parents Present	-0.32 **	-0.30 **	-0.31 *
	Parents Religious	-0.13	-0.11	-0.12
	Parents Blue Collar (reference)			
	Parents White Collar	-0.01	0.00	0.02
Time-Varying Controls	Parents Other	-0.22	-0.20	-0.18
	Secondary Degree	-0.03	-0.02	-0.03
	University Degree	-0.14	-0.16	-0.15
	Technical Degree	0.14	0.13	0.14
	Pregnant (expect)	2.33 ***	2.30 ***	2.30 ***
	Children	0.31	0.26	0.28
	Sex Ratio (100 x W/M)	-0.03	-0.08	-0.07
	Lower Student	0.36	0.40	0.43
	Upper Student	0.17	0.23	0.28 *
	Military Service	0.03	0.06	0.07
Housing Access	Emp. Full-Time (reference)			
	Emp. Part-Time	-0.61 *	-0.57 *	-0.56
	Unemployed	-0.46 ***	-0.39 **	-0.36 *
	Apartment Growth Rate		-0.09 *	-0.11 *
	Detached House Growth Rate		-0.06	-0.07
	Income to Housing Cost Ratio		0.02 *	0.01 *
	Apartment Growth Rate x born 1964			0.06
	Detached House Growth Rate x born 1964			0.04
	Income to Housing Cost Ratio x born 1964			0.05 *
	Constant	2.08	7.35	6.62
Wald χ^2 (df)	243.7 (52) ***	260.1 (55) ***	272.3 (58) ***	

Likelihood ratio χ^2 (df) *nested models*

11.5 (3) **

6.5 (3)

Note on Coefficient Significance: + = $p \leq 0.10$. * = $p \leq 0.05$. ** = $p \leq 0.01$. *** = $p \leq 0.001$.

Table 4. Hypotheses, Results, and Change Over Time

Variable Impact on Risk of Partnering vs. Remaining Alone

Variable	Hypotheses		Model Results		Change Over Time	
	Roommate	Family	Women	Men	Women	Men
Apartment Growth Rate	---	---	n.s.	-	n.s.	n.s.
Detach House Growth Rate	---	+++	+	n.s.	n.s.	n.s.
Income to Cost Ratio	---	+++	+++	+	n.s.	+

Note on Results Significance: n.s. = non-significant. + = $p \leq 0.05$. ++ = $p \leq 0.01$. +++ = $p \leq 0.001$.

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