Union Formation in Later Life: The Economic Determinants of Cohabitation and Marriage Among Older Adults

Dissertation

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By

Jonathan Edward Vespa, M.A.

Graduate Program in Sociology

The Ohio State University

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Dissertation Committee:

Zhenchao Qian, Advisor

Elizabeth Cooksey

Elizabeth Menaghan
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Abstract

This study examines union formation at older ages with two specific research aims. First, it seeks to understand the process of entering marriage and cohabitation among single Americans who are at least 50 years old. Second, it explores cohabitation transitions in later life and whether older cohabiters marry, separate, or remain cohabiting. For both objectives, the goal is to document the prevalence, timing, and patterns of union formation during older adulthood, concentrating especially on the gendered role of economic determinants. To explore these research questions, the study draws on two classical theories of union formation: Becker’s independence hypothesis and Oppenheimer’s theory of marriage timing. It uses 5 waves of longitudinal data from the 1998–2006 rounds of the Health and Retirement Study and employs event history analysis.

Findings suggest that wealth and financial transfers (the exchange of monies between family members) are better predictors of later-life union formation than conventional measures such as education and income. Among single older adults, wealth increases the likelihood of both marrying and cohabiting as compared to staying single, regardless of gender, while wealth has no effect on the likelihood of cohabiting versus marrying. Only among older women do financial transfers increase the risk of remaining single or of cohabiting rather than marrying. These findings support Oppenheimer’s
theory of marriage timing in that the resources of both men and women facilitate union formation. The findings are in contrast to what is known about young adults’ cohabiting unions, however. Among young adults, cohabiters are economically disadvantaged compared to married individuals but among older adults this does not appear to be the case.

Cohabiting unions among older adults also appear to be relatively stable. Roughly two thirds of older adults’ cohabiting unions are intact after 2 years and half are intact after 5 years, although these estimates vary largely by age and to a smaller extent by gender. The cohabiting unions of women who are at least 65 years old are the most stable and least likely to end in marriage compared to those of similarly aged male cohabiters and to those of adults in their 50s and early 60s. Further, wealth has a pronounced stabilizing effect on older women’s cohabitations, deterring both marriage and separation. In contrast, wealth has a transformative effect for male cohabiters by increasing their chances of marriage. These findings support Becker’s gender-specific independence hypothesis in that cohabiting women’s economic resources decrease the likelihood of marriage while facilitating marital alternatives. Thus cohabitation may function as a marital alternative among the oldest cohabiting women.

This study offers several contributions to the field of marriage and the family. It is the first longitudinal study of marriage and cohabitation among older Americans and the first to provide estimates of the durability of later-life cohabiting unions. The study refines the theories of Becker and Oppenheimer by providing empirical evidence for how to best measure economic resources among older adults. It also identifies the contexts of
later-life union formation in which each theory is most applicable. The study challenges findings from previous work which suggest that cohabitation is fragile and poverty a backdrop of later-life cohabiting unions. Understanding later-life union experiences is timely as the number of older Americans continues to increase and their life expectancy rises. Moreover, intimate relationships play a vital role in maintaining individuals’ health and support networks. Examining union experiences among older adults is therefore important for understanding the well being and broader social experiences of a growing portion of the American population.
Dedication

To my family and friends for their encouragement and support.
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Vita

2003 ................................. B.A. George Mason University, Fairfax, Virginia

2006 ................................. M.A. The Ohio State University, Columbus, Ohio

2004 – 2006 ........................... Graduate Teaching Associate, Department of Sociology, The Ohio State University

2005 – 2006 ........................... Research Associate, Online Computer Library Company (OCLC) Columbus, Ohio

2006 – 2007 ........................... Independent Instructor, Department of Sociology, The Ohio State University

2007 – 2010 ........................... Research Associate, Center for Human Resource Research, The Ohio State University

2008 ................................. 3rd Place, Edward F. Hayes Graduate Research Forum, The Ohio State University (coauthored project with Matthew Painter)

2009 ................................. Frank Mott Award, Department of Sociology, The Ohio State University

2009 ................................. Best Poster Award, Population Association of America
Publications


Fields of Study

Major Field: Sociology
Table of Contents

Abstract .................................................................................................................. ii
Dedication ............................................................................................................. v
Acknowledgements ............................................................................................... vi
Vita ........................................................................................................................ vii
List of Tables ....................................................................................................... xiii
List of Figures .................................................................................................... xiv

Chapter 1. Introduction

Union Formation in Later Life: The Economic Determinants of Marriage and Cohabitation Among Older Adults ...................... 1
Demographic Changes in the United States ......................................................... 4
Research Objectives and Contributions .............................................................. 6
Overview and Outline of Study ........................................................................... 8

Chapter 2. Background

Theory, Literature Review, and Research Expectations ................................. 10
I. Theoretical Frameworks ................................................................................... 10
   Becker’s Independence Hypothesis ................................................................. 10
   Oppenheimer’s Theory of Marriage Timing ................................................... 12
Adjudicating the Theories .................................................. 13
Measuring Economic Resources in Later Life ....................... 16
II. The Process of Entering Marriage and Cohabitation Among Single Older Americans ...................................................... 18
   The Setting of Older Adulthood ............................................. 18
   Expectations and Hypothesis for Research Aim 1 ................. 24
   Summary of Hypotheses for Research Aim 1 ....................... 27
III. Cohabitation Stability and Transitions in Later Life ........... 28
   Stability of Cohabiting Unions: Evidence From Young Adulthood ................................................................. 28
   Factors Shaping Cohabitation Stability ................................. 30
   Expectations and Hypotheses for Research Aim 2 ............... 33
   Summary of Hypotheses for Research Aim 2 ....................... 36
Chapter 3. Methods
   Data, Measures and Analytic Strategy ................................ 38
   Data .............................................................................. 38
   Analytic Samples ............................................................ 40
   Outcome Variables ........................................................... 43
   Predictors: Economic Resources ........................................ 44
   Controls ....................................................................... 47
   Analytic Strategy ............................................................ 51
Chapter 4. Results
   Timing, Prevalence, and Economic Determinants of Marriage and Cohabitation Among Single Older Americans ................. 55
Summary Statistics .............................................................. 55
Multivariate Analyses: Partnering Among Single Older Adults ........... 58
  Conventional Measures of Economic Resources ......................... 59
  Later-Life Measures of Economic Resources ............................. 60
Sensitivity Test: Wealth Type and Partnering .............................. 63
Summary of Findings ............................................................. 64

Chapter 5. Results
  Timing, Prevalence, and Economic Determinants of Cohabitation
  Stability and Transitions Among Older Adults .......................... 66
Summary Statistics ..................................................................... 66
Life Table Estimates ................................................................. 69
Multivariate Analyses: Cohabitation Stability Among 50–64
  Years Olds ........................................................................... 71
Multivariate Analyses: Cohabitation Stability Among Persons
  65 Years and Older .................................................................. 74
Sensitivity Check: Cohabitation Stability and Wealth Type .............. 78
Summary of Findings ................................................................. 79

Chapter 6: Discussion and Conclusion
  Implications of Findings and Directions for Future Research .......... 82
Measuring Economic Resources in Later Life .............................. 84
Challenging the Portrait of Older Adulthood from Past Studies ........ 85
Cohabitation Stability and Cohabiting Unions as Alternatives
  to Marriage .......................................................................... 88
Housing Wealth, Financial Transfers, and Their Gendered Role in Union Formation .................................................. 91

Theoretical Implications ................................................. 95

Study Limitations and Directions for Future Research .......... 99

Conclusions ................................................................. 106

References ................................................................. 109

Appendix A. Tables .......................................................... 119

Appendix B. Figures .......................................................... 128
List of Tables

Table 1. Summary Statistics of Single Older Adults by Age and Gender
\((N = 10,451)\) (1998–2006 HRS) ............................................................ 120

Table 2. Discrete-Time Multinomial Logistic Regressions of Partnering Among

Table 3. Discrete-Time Multinomial Logistic Regressions of Partnering Among

Table 4. Sensitivity Test of the Effects of Variant Wealth Measures (Logged) on
Later-Life Partnering Among Single Older Adults, by Age and Gender
(1998–2006 HRS) ................................................................. 123

Table 5. Summary Statistics of Older Cohabiters by Gender and Age
\((N = 1,136)\) (1998–2006 HRS) ............................................................ 124

Table 6. Stability of Cohabiting Unions Among Individuals 50–64, Discrete-
Time Multinomial Logistic Regression (1998–2006 HRS) ....................... 125

Table 7. Stability of Cohabiting Unions Among Individuals Aged 65+, Discrete-

Table 8. Sensitivity Test of the Effects of Variant Wealth Measures (Logged)
on Later-Life Cohabitation Stability, by Gender and Age (1998–2006 HRS) ... 127
List of Figures

Figure 1. Economic Resources of Single Older Women by Resource Type, Partnering Status, and Age (1998–2006 HRS) ........................................ 129

Figure 2. Economic Resources of Single Older Men by Resource Type, Partnering Status, and Age (1998–2006 HRS) ................................. 130

Figure 3. Percentage of Single Older Women Engaging in Financial Transfers and Income Provision by Partnering Status and Age (1998–2006 HRS) ........... 131

Figure 4. Percentage of Single Older Men Engaging in Financial Transfers and Income Provision by Partnering Status and Age (1998–2006 HRS) ............ 132

Figure 5. Economic Resources of Older Cohabiting Women by Resource Type, Partnering Status, and Age (1998–2006 HRS) ........................ 133

Figure 6. Economic Resources of Older Cohabiting Men by Resource Type, Partnering Status, and Age (1998–2006 HRS) .............................. 134

Figure 7. Percentage of Older Cohabiting Women Engaging in Financial Transfers and Income Provision by Transition Experience and Age (1998–2006 HRS) ........................................... 135

Figure 8. Percentage of Older Cohabiting Men Engaging in Financial Transfers and Income Provision by Transition Experience and Age (1998–2006 HRS) ........................................... 136

Figure 9. Survivor Curves of Cohabiting Unions Among Older Adults (Aged 50–64) Across Years Since Cohabitation by Gender (1998–2006 HRS) ... 137

Figure 10. Survivor Curves of Cohabiting Unions Among Older Adults (Aged 65+) Across Years Since Cohabitation by Gender (1998–2006 HRS) ...... 138
Chapter 1. Introduction

Union Formation in Later Life:

The Economic Determinants of Marriage and Cohabitation Among Older Adults

Marriage and the family are a core focus of the social sciences and numerous studies have explored union formation, that is the process of entering marital and cohabiting relationships. Over recent decades, marriage and family patterns in the United States have changed dramatically from their historically unusual patterns in the 1950s (Coontz 2004; Thornton 2001). Divorce rates, nonmarital fertility, and age at first marriage have risen while overall marriage and fertility rates have fallen (Bianchi and Casper 2000; Morgan and Taylor 2006). For example, age at first marriage in 1950 was 22.8 for men and 20.3 for women. Today, those ages have risen by five years for men and six years for women (U.S. Census Bureau 2007). Moreover, between 1950 and the start of the twenty-first century, the total fertility rate in the United States fell from 2.98 to 2.05 while the percentage of all births that occurred to unmarried women rose from 4% to 33% (Ventura and Bachrach 2000; U.S. Census Bureau 2001).

At the same time these demographic changes are occurring, cohabitation—living together in a romantic relationship without being married—has gained acceptance among Americans and become a widespread practice (Bumpass and Lu 2000; Schoen, Landale,
and Daniels 2007; Thornton and Young-DeMarco 2001). Cohabitation was relatively rare in the 1950s and even by the 1970s there were only about 1 million cohabiters in the United States, comprising less than 1% of all households. Today, that number has risen tenfold to 10 million cohabiters who make up over 5% of households (Casper and Cohen 2000; U.S. Census Bureau 2001). Cohabitation has become so prevalent that it is now the commonest first coresidential union among young adults with fully 60% of them having cohabited by age 24 (Schoen et al. 2007), up from 47% a decade ago (Bumpass and Lu 2000). In short, nontraditional family forms have flourished in the United States as well as in other Western societies (Iacovou 2002). These changes have led to debates about whether a retreat from the traditional family is underway (c.f., Popenoe 1993).

In an effort to explain changing marriage and family patterns in the United States, social scientists have focused on the role of economic factors. They have paid special attention to women’s growing economic independence via increased educational attainment, labor force participation, and earnings relative to men. As a result, a long line of social science research has documented the economic determinants of marriage (Becker 1991; Goldscheider and Waite 1986; Lichter et al. 1992; Oppenheimer 1988, 1994, 2003; Oppenheimer and Lew 1995; Sassler and Goldscheider 2004; Xie et al. 2003) and, as it is has become more common, cohabitation as well (Clarkberg 1999; Oppenheimer 2003; Sassler and McNally 2003; Smock et al. 2005).

In an effort to better understand cohabitation, scholars have asked whether cohabiting unions are stepping-stones into marriage or whether they function as marital alternatives, particularly for economically independent women (Casper and Bianchi
2002; Heuveline and Timberlake 2004; Rindfuss and van den Heuvel 1990). These questions ultimately revolve around the stability of cohabiting relationships and whether cohabiters transition into marriage. Most studies conclude that cohabitation tends to be short-lived (Bumpass and Lu 2000; Bumpass and Sweet 1989; Lichter, Qian, and Mellott 2006; Wu 1995; Wu and Pollard 2000), ending in either marriage or separation after just a few years (Manning and Smock 1995; Sanchez et al. 1998; Wu and Balakrishnan 1995). For most cohabiters, therefore, cohabitation does not function as a long-term marital alternative.

Despite the prevalence of studies on union formation, they are characterized by a widespread bias. With few exceptions, social science research addresses the union formation experiences of young adults (Allen, Blieszner, and Roberto 2000; Cooney and Dunne 2001). Marriage and cohabitation are not just young persons’ experiences, however our knowledge of them in later life is limited to a handful of studies. Social scientists know very little about marriage and cohabitation at older ages, the role of economic factors—which are critical during young adulthood—in later-life union formation, and whether cohabitations among older adults are as short-lived as they tend to be at younger ages.

The current study is a response to this dearth of information. It is an effort to better understand the process of union formation among older Americans, especially the prevalence, timing, and economic determinants of later-life marriage and cohabitation.
Demographic Changes in the United States

A number of demographic changes in the United States make it timely to study union formation among older adults. For one, the population and age structures of the United States are changing. Since 1900, the number of older Americans (aged 65+) has increased 12 times (from 3.1 million to 37.9 million) and their percentage of the population has tripled (from 4.1% to 12.6%). In this decade alone (2000–2010), their numbers will increase by 15% (from 35 to 40 million) and by the close of the next decade the number of older Americans is projected to increase an additional 36% to 55 million (U.S. Census Bureau 2007). Indeed, by 2030 older Americans are expected to make up one fifth of the entire U.S. population, up from 12% today. Not only is the number of older Americans rising but so is their life expectancy which has increased nearly 10 years over the last half century. Whereas typical 65 year olds could expect to live another 14 years in 1950, they can expect to live almost 20 more years today (NCHS 2008).

Alongside changing population and age structures are changing household structures in the United States. Americans are growing older, living longer, and spending more time unmarried. In 2007, only one half of older Americans lived with a spouse and fully one third lived alone (U.S. Census Bureau 2007). Through cohort replacement by aging baby boomers, older adults have rising divorce rates, falling remarriage rates, and increasingly favorable views of cohabitation (Allen, Blieszner, and Roberto 2000; Cooney and Dunne 2001; Thornton and Young-DeMarco 2001). The growing acceptance of cohabitation among older adults coincides with a monumental growth in its prevalence among this population, as well. Of the 10 million cohabiters in the United States in 2000,
over 1 million were at least 50 years old (U.S. Census Bureau 2001). Older adults comprise the fastest growing group of cohabiters in the United States. In the 1950s, there were a few thousand older cohabiters in the United States. Since then, their numbers have increased anywhere between a conservative 100 times up to 576 times, depending on estimates (Chevan 1996; Fitch et al. 2005). A consequence of these demographic changes is that a substantial and rising number of older Americans has the opportunity and time to form new unions along with the expectation of living many years to enjoy them.

Despite these demographic changes, we know little about later-life union formation. Our knowledge is limited to mainly qualitative work based on European, specifically Dutch, samples (de Jong Gierveld 2002, 2004; de Jong Gierveld and Peeters 2003; Stevens 2002) and Canadian samples (van den Hoonard 2002). Where quantitative work in the United States has been done, it has examined remarriage only (Smith et al. 1991), used indirect measures of cohabitation from the 1960–90 Censuses when cohabitation was relatively rare (Chevan 1996; Hatch 1995), or used cross-sectional data (Brown et al. 2006; King and Scott 2005).

The importance of these studies should not be understated, however. They have been instrumental in initiating research on later-life union formation. One of the reasons why so little work has been done on this topic is because of data constraints. Until recently, there have been few data sources that collect information on older adults’ union formation, especially large-scale ones that can capture adequate samples of older cohabiters (Chevan 1996). But despite the pioneering work of these studies, there is still a
dearth of information on later-life marriage and cohabitation at the same time that the demographic impetus to understand these experiences is rising.

**Research Objectives and Contributions**

This study focuses on union formation at older ages. It does so by examining two specific research questions. First, it seeks to understand the process of entering heterosexual and residential unions, specifically marriage and cohabitation, among single older Americans. Second, it explores cohabitation transitions and stability in later life by focusing on whether older cohabiters transition to marriage, dissolve and break up, or remain cohabiting. Both of these research aims address union formation but do so by focusing on different processes (i.e., single older adults moving into marriage and cohabitation, and the union transitions of older adults who are already cohabiting).

For both objectives, the goal of the study is to document the prevalence, timing, and economic determinants of union formation during older adulthood. In doing so, the study pays close attention to the gendered relationship between economic resources and union formation in later life. It attempts to discern whether single women’s economic resources deter marriage at older ages while promoting marital alternatives such as singlehood and cohabitation.

By exploring later-life union formation, the study offers several contributions to the study of marriage and the family. Empirically, it expands the literature on later-life union formation by using event history analysis and discrete time models, and data from a large, nationally representative sample of older Americans. It is the first longitudinal
study in the United States to examine both marriage and cohabitation among older adults. It is the first to provide estimates of the durability of later-life cohabiting unions and the timing associated with their transitions. The study’s findings also underscore the importance of measuring economic resources given the life course stage in which union formation occurs.

Theoretically, the study is grounded in two classical theories that are widely used to study union formation and the role of women’s economic independence. It refines both theories to studying marriage and cohabitation at older ages and identifies contexts in which the theories offer predictive insights. In doing so, the study amends and updates findings from previous research. Many of the conclusions drawn about young adults’ cohabiting unions may not be applicable to those in later life. In particular, this study challenges the notion that later-life cohabitation is characterized by poverty (Chevan 1996; Brown et al. 2006) and that cohabiting unions at older ages are as fragile and transitory as they are during young adulthood.

These contributions are timely because of the kinds of demographic changes that are occurring in the United States, which I have outlined above. They are also important because intimate relationships play a vital role in the health and well-being of individuals at all ages (Mastekaasa 1994; Rook 1997; Walker et al. 2001). They provide partners who monitor one’s health and behavior and fill one’s life with meaning and purpose (Ross 1995; Waite 1995). Exploring later-life union formation therefore aids in scholars’ understanding of the experiences and lives of a large and growing portion of the American population.
Overview and Outline of the Study

Chapter 2 sets the background for studying later-life union formation. It is organized into three parts. The first section covers the theoretical framework and its application to the current study. The second and third sections cover the study’s two research aims: to explore the prevalence, timing, and economic determinants of (1) marriage and cohabitation among single older adults, and (2) cohabitation stability and transitions in later life. Each of these latter sections discusses relevant background information as well as analytical expectations based on prior research and the theoretical framework.

Chapter 3 addresses the data and analytic methods that are used in the study. It draws on 5 waves of longitudinal data from the 1998–2006 rounds of the Health and Retirement Study, and event history analysis. Chapter 3 is organized into two parts. The first section discusses the analytic samples and measures used in the study. The second section reviews the analytic strategy and statistical methodologies.

Chapter 4 presents empirical results for the first research aim about the economic determinants of marriage and cohabitation among single older adults. It begins with an overview of descriptive statistics and then presents findings from discrete-time multinomial logistic regressions.

Chapter 5 presents empirical results for the second research aim about later-life cohabitation stability and transitions. It begins with an overview of descriptive statistics including life table estimates and then presents findings from discrete-time multinomial logistic regressions.
Chapter 6 discusses the empirical and theoretical implications of the study as well as its contributions to the field of marriage and the family. It concludes with a discussion of study limitations, ways for improving the research, and directions for future work on later-life union formation.
Chapter 2. Background

Theory, Literature Review, and Research Expectations

This chapter presents the theoretical framework, literature, and expectations for the study’s primary research goals. It is divided into three sections. The first part discusses the theoretical framework and its application to union formation at older ages, including how to measure economic resources that are salient to older adulthood. The second and third parts explore the research aims, discussing the relevant literatures and research expectations.

I. Theoretical Framework

The theoretical motivation for this study is drawn from two classical theories that are widely used in studying union formation: Becker’s (1991) independence hypothesis and Oppenheimer’s (1988, 1994, 1997) theory of marriage timing. Both theories are similar in that they focus on the role of economic resources in union formation. Each theory takes opposing views, however, in how economic resources affect women’s (but not men’s) likelihood of marrying and cohabiting.

Becker’s Independence Hypothesis. According to Becker (1991), the gains to marriage are greatest when men specialize in the market, women the home, and they
exchange comparative advantages. Men are evaluated as potential partners in terms of their current and future economic contributions to the household. Greater economic resources allow men to offer greater financial security to a potential partner than men with fewer resources (Lam 1988). As a result, men’s economic resources increase the likelihood of marriage while men in poorer economic standing have higher likelihoods of remaining single or cohabiting relative to marrying.

Women’s economic resources, on the other hand, do not have the same relationship to union formation as men’s resources. Over recent decades, women’s educational attainment, labor force participation, and earnings have increased relative to men’s. By forgoing specialization in the home and instead concentrating efforts in the labor market, women have gained economic resources which, in turn, have lowered their economic dependence on a potential husband. In short, Becker (1991) argues that women with high economic resources have little incentive to marry because they do not have to rely on a potential husband’s resources for support. The “independence hypothesis” therefore posits that women’s resources reduce the likelihood of marriage.

Moreover, women’s economic resources make marital alternatives such as cohabitation both attractive and feasible. Because women with high resources do not specialize in home production, they have less to exchange in marriage markets. Not only does this lower the chances of marrying, Becker argues, but it makes cohabitation a more attractive alternative for women with high resources: cohabitation’s roles and norms for specialization are more ambiguous than in marriage (Cherlin 2004; Nock 1995).
**Oppenheimer’s Theory of Marriage Timing.** In opposition to the independence hypothesis, Oppenheimer (1988, 1994, 1997) argues that men *and* women’s economic resources increase their likelihoods of marriage relative to marital alternatives. For Oppenheimer, the likelihood of marriage, and of union formation more broadly, depends very much on individual perceptions of economic security. Marrying requires sufficient economic resources to establish *and* maintain an independent household. In other words, the feasibility of marriage depends on meeting minimum financial prerequisites in the present and maintaining them in the future because marriage is seen as a long-term commitment (Oppenheimer 1988; Oppenheimer et al. 1997; see also Dixon 1971).

Historically, men’s economic resources have been critical for meeting the economic prerequisites of marriage (Dixon 1971; Hajnal 1965). Changes in labor market conditions over recent decades have deteriorated men’s economic standing while improving women’s. These changes have in turn transformed the marital bargain, Oppenheimer argues. Men’s resources are still important for union formation. But because the economic threshold for marriage is becoming more difficult to achieve for a sole male breadwinner, women are increasingly evaluated on their economic standing as well. In other words, women’s resources are critical for meeting the minimum economic requirements for establishing a married household.

In light of changing labor market conditions, women’s economic resources *increase* the likelihood of marriage because they are highly valued in marriage markets for helping establish and maintain a household. From Oppenheimer’s perspective, women’s economic resources therefore increase the gains to marriage. Specialization
then is costly (not advantageous, as Becker argues) because “the temporary or permanent loss of one specialist in a family can mean that functions vital to the well-being of the complementary specialist . . . are not being performed” (Oppenheimer 1997:447).

By increasing the likelihood of marriage, women’s economic resources discourage marital alternatives. Thus, whereas Becker reasons that cohabitation is a response to economic security among women, Oppenheimer argues the opposite: Cohabitation is a response to economic uncertainty and low resources among both men and women (Oppenheimer 1988, 2003). Because cohabitation is typically thought to be a less committed and more transitory relationship than marriage, its economic prerequisites are lower than marriage’s. Individuals who are unwilling to marry because of low resources or economic uncertainty may instead cohabit (Landale and Forste 1991; Oppenheimer 1988, 2003; Smock and Manning 1997). According to this perspective, low economic resources facilitate cohabitation relative to marriage for men (as Becker argues) but also for women (contrary to the independence hypothesis).

**Adjudicating the Theories.** A wealth of studies have tested Becker and Oppenheimer’s theories of union formation on samples of young adults. Most research finds evidence of a strong positive relationship between men’s economic resources and the likelihood of marriage, regardless of whether resources are measured using education, employment, or income (Cooney and Hogan 1991; Goldscheider and Waite 1986; Oppenheimer et al. 1997; Sassler and Schoen 1999). This finding is consistent with the theories of Becker and Oppenheimer.
When examining the relationship between union formation and women’s economic resources, most studies find little support for the independence hypothesis. Resources, again whether measured as education, employment, or income, typically increase women’s likelihood of marriage (not decrease, which is what the independence hypothesis would predict). Education is sometimes found to delay—but not reduce—women’s transition to marriage (Goldscheider and Waite 1986; Lichter et al. 1992; Mare and Winship 1991; McLaughlin and Lichter 1997; Oppenheimer and Lew 1995; Oppenheimer, Kalmijn, and Lim 1997; Sassler and Schoen 1999; Sweeney 2002).

Overall, these findings are consistent with Oppenheimer’s theory of marriage timing in that women’s resources facilitate marriage.

Only a handful of studies find support for the independence hypothesis (Cready, Fossett, and Kiecolt 1997; Lichter, LeClere, and McLaughlin 1991; McLanahan and Casper 1995; Preston and Richards 1975; Waite and Spitze 1981). Using aggregated data to examine the prevalence of marriage, they find that marriage rates tend to be lower in areas with high female employment. In other words, women’s economic resources appear to decrease marriage while facilitating singlehood. These studies are criticized because aggregate-level variation may not accurately reflect individual-level behaviors (Oppenheimer 1997).

To date, no study has found evidence that cohabitation is associated with economic advantage relative to marriage. Individuals in poor economic standing (i.e., those with low levels of education, unstable employment, and low incomes) have higher likelihoods of cohabiting than marrying (Clarkberg 1999; Oppenheimer 2003; Xie et al.)
2003). Even among cohabiters, those with good economic prospects are the most likely to marry whereas their poorer counterparts either remain cohabiting or break up (Brown 2000; Sanchez, Manning, and Smock 1998; Smock and Manning 1997). These findings run counter to the independence hypothesis in that women’s economic resources do not appear to facilitate cohabitation relative to marriage.

Nevertheless, we should not dismiss the independence hypothesis. Indeed, both theories may be applicable to later-life union formation. First, the theories focus on specialization which does not, at first glance, seem relevant to older adulthood. Older women have completed their fertility and many older men are no longer employed. But the broader concept of specialization (as a mode of family and household organization) may be relevant still for later-life union formation. Asymmetrical care giving arrangements and household labor are normative among older cohorts of women. As individuals age, these arrangements become highly salient. Women disproportionately assume greater care giving responsibilities for partners than men (Barusch and Spaid 1989) while older men specifically state that they expect such support from their partners (Bulcroft and O’Conner 1986). Moreover, because of gaps in education and employment throughout their life course, older women disproportionately rely on a male partner’s resources (e.g., pensions, savings) for economic provision even when he is no longer employed (Burkhauser, Butler, and Holden 1991; Hoffman and Duncan 1988; Smith and Zick 1986). Consistent with the idea that women rely on men for instrumental support and social standing, older women explicitly identify status rewards as a chief advantage of later-life relationships (Bulcroft and O’Conner 1986).
Second, given the limited number of studies on union formation at older ages we should not dismiss *a priori* one theoretical framework over another. Both theories merit empirical investigation. Before this can be done, however, they require a reorientation to studying later-life union formation. Previous empirical tests of the theories have used various measures of economic resources including education, employment, and income (Goldscheider and Waite 1986; Lichter et al. 1992; Mare and Winship 1991; McLaughlin and Lichter 1997; Oppenheimer and Lew 1995; Oppenheimer, Kalmijn, and Lim 1997; Sassler and Schoen 1999; Sweeney 2002). These studies have engaged in considerable debate over how to measure economic resources. Oppenheimer argues that education is more appropriate than income because young adults have not yet established mature employment trajectories (Oppenheimer et al. 1997). Education therefore better captures young adults’ economic potential at a time when their employment is unstable and income low. In other words, *measures of economic resources should be salient to the life course stage in which union formation occurs*. How then should economic resources be measured during older adulthood?

**Measuring Economic Resources in Later Life.** Older adults completed their education decades ago. Many are retired or are winding down their careers and so have small incomes. It seems unlikely that economic potential (education) or work-related measures (employment, earnings) best capture older adults’ resources. Rather economic *standing* may be more salient among older adults than economic *potential*. Indeed, economic standing is critical for how individuals perceive economic security and evaluate their ability to meet marriage’s financial prerequisites (Oppenheimer 1988).
Wealth is one such measure of economic standing. It reflects a lifetime of savings and investments in stocks, retirement accounts, and real estate from decades of employment and earnings. Wealth includes financial assets which are easily liquid and nonfinancial assets such as housing. Homeownership is a core asset of Americans (McNamee and Miller 1998) especially older adults for whom it represents independence and security (Chevan 1996; Hatch 1995). Because wealth is an accumulated stock of savings, it is less sensitive to changing income or employment at older ages and thus is a better barometer of later-life economic resources. In other words, wealth is a salient measure of economic resources given older adults’ life course stage.

In addition to wealth, financial transfers capture an important dimension of later-life resources. Whereas wealth represents a foundation of resources, transfers could reflect a potential drain on resources. Transfers are money given in the form of gifts, loans, or aid from one family member to another often across generations. They are an enduring aspect of later life and older adults feel substantial obligation to give financial assistance to family members (Cheal 1983; Hatch 1995; Morgan 1982). One half of older Americans routinely makes financial transfers, usually to offspring, while one tenth extensively makes transfers (Hogan, Eggebeen, and Clogg 1993). Coresidence can be a form of assistance as well that involves entrenched financial transfers (at least in terms of sharing housing). Patterns of coresidence and transfers are not evenly distributed across genders, however. Compared to older men, older women are more likely to have coresiding family (Spitze and Logan 1990), 86% more likely to give financial assistance
to family members, and 19 times more likely to engage in extensive transfers with family members (Hogan et al. 1993).

In summary, measures of economic resources should be sensitive to the life course stage in which union formation occurs. To test Becker and Oppenheimer’s theories during young adulthood, it is appropriate to use education, employment and income because they are germane to young adults’ experiences of completing education and establishing new work roles. In the same vein, it is less appropriate to use wealth because young adults have had little time to accumulate it through homeownership and returns to investments and savings. In later life, however, wealth and transfers are potentially more salient measures. With this in mind, I turn attention to the study’s research aims.

II. The Process of Entering Marriage and Cohabitation Among Single Older Americans

The Setting of Older Adulthood

To help orient a study on later-life union formation, it is useful to discuss the setting or context of older adulthood. Doing so grounds the study of union formation in the experiences and factors salient to later life and provides a general basis for many of our expectations about union formation. A number of factors frame the setting of older adulthood, which can be divided into three categories: demographic, individual, and economic. Throughout the discussion, note the recurring theme of gendered differences.
Demographic. The first demographic factor to consider is gender, particularly sex ratios. Older women face a growing sex-ratio imbalance as they age. In 2007, 22 million older women and 16 million older men lived in the United States, a sex ratio of 137 (i.e., there were 137 older women for every 100 older men). The sex ratio varies by age, from 114 for 65–69 year olds to 210 for persons 85 and over (National Center for Health Statistics 2008). In short, older women outnumber older men which limits the availability of potential male partners for women. Men’s tendency to partner with younger women further exacerbates the sex-ratio imbalance (Goldman et al. 1984). Thus although men comprise one quarter of the older population, they make up nearly two thirds of older cohabiters (Chevan 1996). It is little surprise then that older men are more likely to be repartnered than older women (Brown et al. 2006; Chevan 1996; de Jong Gierveld 2004; Wu and Balakrishnan 1994).

Along with gender, age is an important demographic factor. For older men and women, the chances of union formation decline with age (Brown et al. 2006; Hatch 1995; de Jong Gierveld 2004). The greatest likelihood of union formation also occurs within the first few years following marital dissolution (de Jong Gierveld 2002, 2004; Smith et al. 1991; Wu and Balakrishnan 1994). In other words, if widowed and divorced older persons enter new unions they are most likely to do so within a few years of becoming single. The timing of repartnering is gendered, as well. Single older men tend to repartner faster than single older women (de Jong Gierveld 2002).

Unlike the marital history of most single young adults (who are typically never married), most single older adults are either divorced or widowed. Older divorced
individuals are more likely to remarry or cohabit than the widowed (Chevan 1996; de Jong Gierveld 2002). Many widowed persons feel that their former marriages were satisfying and they express loyalty to their deceased spouses (Davidson 2002; Stevens 2002). Widowhood then may lead to prolonged singleness in later life. A selective population in older adulthood, never married adults likely have nontraditional attitudes about union formation which led them away from marriage in the first place (Bulcroft and Bulcroft 1991).

During young adulthood, union formation patterns differ across racial/ethnic groups. Cohabitation is more common among blacks and Hispanics than among whites (Raley 1996) while overall marriage rates are higher among whites (Lichter et al. 1992; Schoen et al. 2007). Via cohort replacement, aging racial/ethnic minorities may carry similar union formation patterns into older adulthood. Health is highly salient to older adults because it serves as a signal of mortality, morbidity, and general quality of life (Smith et al. 1991). Individuals’ health therefore may shape their likelihood of marrying and cohabiting. Single older adults who are in poor health are more likely to cohabit than marry (Brown et al. 2005). And although older adults are reluctant to partner with poor-health individuals (Bulcroft and Bulcroft 1991), older women weigh a potential partner’s health limitations more seriously than older men before beginning a new relationship (Karlsson and Borell 2002).

**Individual.** Single older women are especially disinterested in marriage (Bulcroft and Bulcroft 1991; Bulcroft et al. 1989). Nearly 8 in 10 of them oppose marrying and half very strongly oppose it (Talbott 1998). One reason is that many single older women value
their autonomy and fear that marriage will trap them in traditional marital roles and care giving burdens (Bulcroft and O’Conner 1986; Karlsson and Borell 2002; Talbott 1998). Because many single older women are widowed, much of this reluctance stems from anxiety over potentially reliving the experience of a spouse’s illness and death (Davidson 2002).

A second reason single older women are disinterested in marriage is that they value financial independence and have deep anxieties about their financial security (i.e., controlling their finances and having enough resources to avoid institutionalized living, dependency on family assistance, and poverty more broadly) (Chevan 1996; Davidson 2002; Hatch 1995). Older women are anxious that marriage could jeopardize their financial security by threatening pensions and entitlement incomes (de Jong Gierveld 2002; de Jong Gierveld and Peeters 2003), the receipt of which often depends on marital status (Chevan 1996; Stanfield and Nicolaou 2000). Their apprehension is not necessarily unwarranted. Nearly two thirds of single older women receive at least half their income from entitlement sources (McGarry and Schoeni 2000). This fear may explain why 4 out of 5 older adults in nonmarital relationships have no shared asset of any kind (Karlsson and Borell 2002).

Single older men, in contrast, tend not to report such anxieties about marriage. Instead, they often report feeling deprived of their former wife’s care giving. Over the course of long marriages, men have come to expect and depend on traditional marital roles (Lee et al. 1998; Mason 1996). We should not conclude that single older women are uninterested in intimate relationships all together, though (Bulcroft and O’Conner 1986;
de Jong Gierveld 2002). Many single older women are looking for or open to companionship and new relationships, just not marriage which they perceive as entailing a reorganization of their lives around those of their new husband and his family and friends.

Single older women report that they prefer unions that preserve their autonomy, both financial and personal (Davidson 2002; de Jong Gierveld 2002; Karlsson and Borell 2002; van den Hooaard 2002). Indeed, one quarter of single older women express interest in cohabitation (Bulcroft and Bulcroft 1991). As researchers have suggested, this interest may stem from the nature of cohabiting unions in that they typically engender fewer care giving expectations and economic ties than marriage (de Jong Gierveld 2002; Karlsson and Borell 2002).

**Economic.** Economic factors are strongly associated with current union status and marital history. For example, poverty in later life typically characterizes singlehood. Widowed and divorced individuals have one third and one half the wealth, respectively, of continuously married persons (Wilmoth and Koso 2002). But poverty is also gendered. In contrast to single older men, their female counterparts are disproportionately poor. Single women are most likely to have lost their primary provider whereas single men typically retain their predissolution standard of living (Burkhauser, Butler, and Holden 1991; Hoffman and Duncan 1988; Smith and Zick 1986).

Some work has explored the relationship between economic resources and union formation at older ages. The findings are mixed, however. Some studies report that education and income negatively associate with cohabitation compared to marriage.
among older men (Hatch 1995). Further, older female cohabiters tend to have lower household incomes than their remarried counterparts (Brown et al. 2006). These findings have led some to conclude that later-life cohabitation is characterized by economic disadvantage and poverty (Brown et al. 2006; Chevan 1996).

We should be tentative about this conclusion because other studies find that employment and education positively associate with later-life cohabitation (Chevan 1996; de Jong Gierveld 2004). Similarly, older female cohabiters have a greater likelihood of full-time employment (Brown et al. 2006) and higher earnings (Hatch 1995) than older married or single women. Yet other studies find no relationship between education and cohabitation at older ages (Chevan 1996; Wu and Balakrishnan 1994) while Brown et al. (2006) find no difference between the incomes of older remarried and cohabiting men. It is unclear how economic resources correlate with later-life marriage, as well. Education may positively associate with later-life remarriage compared to singlehood (de Jong Gierveld 2004). Yet other studies find the opposite relationship for widowed women, suggesting that women’s economic resources facilitate singlehood (Smith et al. 1991).

These mixed findings may stem in part from how these studies measure economic resources. None of them has used wealth or financial transfers to examine the relationship between economic resources and later-life union formation. Instead, these studies have relied on more conventional measures, noted above, such as education and income. Given the theoretical frameworks and the demographic, individual, and economic settings of older adulthood, what can we expect about the process of single older adults entering marriage and cohabitation?
Expectations and Hypotheses for Research Aim 1

Becker (1991) argues that women’s economic resources decrease the likelihood of marriage. Few empirical findings support this hypothesis. Instead, resources increase the likelihood of marriage even if they delay that transition somewhat (Goldscheider and Waite 1986; Lichter et al. 1992; Mare and Winship 1991; McLaughlin and Lichter 1997; Oppenheimer and Lew 1995; Oppenheimer, Kalmijn, and Lim 1997; Sassler and Schoen 1999; Sweeney 2002). Here we should consider the demographic setting of older adulthood. Single older women face substantial constraints in marriage markets which further compound as they age. If single older women’s resources were to delay marriage, in effect subsidizing the search process (Oppenheimer 1988), that delay could be synonymous with nonmarriage in later life because of marriage market constraints. In this case, single older women’s resources would, in effect, be negatively related to their likelihood of marrying—consistent with the independence hypothesis.

Besides the demographic setting of older adulthood, another factor lends credence to Becker’s model. Later-life singlehood is financially risky while marriage can be advantageous for single older women. For example, widows who remarry can expect gains to their wealth as large as if they were never widowed (Zick and Smith 1988). In other words, there is financial incentive for single older women with fewer resources to marry. Cohabitation in contrast is a poor economic substitute for marriage. Divorced and widowed cohabiters have one third the wealth of continuously married persons whereas their remarried counterparts have three quarters the wealth of the continuously married (Wilmoth and Koso 2002).
Later-life marriage then may be attractive for women with low wealth while singlehood and cohabitation are feasible for older women who have greater resources (i.e., those women who can afford to live independently). Indeed, Smith et al. (1991) find that education positively associates with singlehood compared to remarriage among widowed women. This finding has led the authors to conclude that resources subsidize singlehood in later life for women—again consistent with the independence hypothesis. Cohabitation, on the other hand, could appeal to older women who desire companionship but want to protect their resources from the legal complications of marriage and avoid asymmetrical distributions of household labor. Such a motivation would be consistent with older women’s attitudes and apprehension about marriage. It is feasible then that older women’s wealth positively associates with marital alternatives such as singlehood and cohabitation.

Oppenheimer’s model could be relevant, as well. Older adults are deeply concerned about financial security and maintaining an independent household (Chevan 1996; Hatch 1995; Karlsson and Borell 2002). If specialization is risky during young adulthood, several factors make it perilous in later life: morbidity, the financial distresses of widowhood and divorce, and the constraints of retirement on recouping lost savings. In contexts where it is precarious to specialize, women’s resources are increasingly evaluated for their potential contributions to a household (Oppenheimer 1988, 1994). Wealth therefore may be an attractive characteristic in potential older husbands and wives.
Moreover, the gains to marriage are not necessarily reduced when husbands and wives are wealthy: they both benefit from greater resources. In this way, older women’s resources may be viewed favorably because they contribute to a household’s financial security. It is reasonable to expect that wealth positively associates with marriage among single older men and women while discouraging marital alternatives—consistent with Oppenheimer’s theory.

Depending on the theoretical perspective, wealth could have two different relationships with union formation for older women (recall that both theories make the same predictions for a positive relationship between men’s resources and union formation). The case for financial transfers is different. From both Becker and Oppenheimer’s perspectives, financial transfers likely increase the costs of union formation, marriage especially. Older adults may be uninterested in assuming the financial burden of a potential spouse’s family. Moreover, marriage reduces the amount and frequency of financial assistance that older adults give to family (Pezzin and Schone 1999). Thus, transfer recipients have a vested interest in discouraging their older kin’s marriage, especially because that assistance forms a substantial portion of young adults’ resources (Hao 1996). Offspring often resent their parents’ remarriage and may even pressure them to cohabit as a means of safeguarding their parents’ assets (Chevan 1996; de Jong Gierveld and Peeters 2003; Hatch 1995).

Older adults who make transfers therefore face potential family conflict if they marry. To circumvent conflict, older adults often practice a strategy of “passive acquiescence” to their family’s wishes (Beel-Bates et al. 2007; Pyke 1999). In this way,
family ties via financial transfers could function as a kind of social control over older adults’ union formation (Hatch 1995). Indeed, the number of offspring, especially residential offspring, have negative effects on single older women’s likelihood of marriage (Smith et al. 1991; Wu 1995). Compared to widowed men, four times as many widowed women report that the reason they do not remarry is because their adult children discourage them from doing so (Davidson 2002). Offspring are not associated with single older men’s likelihood of marrying though, perhaps because their family relationships deteriorate after marital dissolution (Di Leonardo 1987). Financial transfers therefore may decrease the likelihood of marriage over singlehood for women but they may not have the same effect on cohabitation.

Cohabitation is typically thought to be a less committed union than marriage. Cohabiting partners have fewer legal and normative obligations to one another than do spouses. And because cohabitation is not legally defined, it does not commingle assets in the same way as marriage. Thus, financial transfers may have little effect on the chances of cohabiting versus staying single although they could increase the likelihood of cohabiting versus marrying, notably for single older women.

Summary of Hypotheses for Research Aim 1

Based on theory and past research, I explore the following three hypotheses in Chapter 4 about the economic determinants of marriage and cohabitation among single older adults.
Hypothesis 1. Later-life measures of economic resources (e.g., wealth, financial exchanges) are more salient predictors of union formation than conventional measures such as education and income.

Hypothesis 2. Wealth facilitates marriage among single older men relative to staying single or cohabiting. In contrast, wealth facilitates marital alternatives such as cohabitation and singlehood among single older women relative to marriage.

Hypothesis 3. Financial exchanges with family discourage marriage relative to singlehood but encourage cohabitation relative to marriage. These relationships will be more salient among single older women than men.

III. Cohabitation Stability and Transitions in Later Life

Like the literature on union formation, there are numerous studies on cohabitation stability and transitions into marriage—though again the same life course bias is present. Without exception, all of the extant studies on cohabitation stability use samples of young adults. This literature should not be dismissed, though. It provides a starting point for the current study, a way to identify important factors and variables, and a way to ground expectations.

Stability of Cohabiting Unions: Evidence from Young Adulthood

Prior studies have generally reached a consensus about cohabitation stability and transitions during young adulthood. Cohabitation is a transitory, short-lived union. Most cohabiters marry or separate within a few years, although the proportion of cohabiters
that eventually marries has been declining over time. Bumpass and Lu (2000) find that 50% of cohabitations end within one year and very few cohabitations are longer lived: 1 in 3 remain intact after two years (Bumpass and Sweet 1989), 1 in 5 after four years (Manning and Smock 1995), and just 1 in 10 after five years (Bumpass and Lu 2000; Lichter et al. 2006). Cohabiting unions in Canada are somewhat more robust than their American counterparts. About 25% of cohabiting unions in Canada end within a year (Wu 1995) though in more recent samples that number is lower: just 12% end within one year (Wu and Pollard 2000).

Cohabiters may “exit” their unions in two ways: via singlehood (the dissolution or separation of a cohabiting union) or marriage (transforming the cohabiting union into a marital one). Roughly equal numbers of cohabiters do both. After two years, 25.5% of American cohabiters have separated while 28.8% have married (Sanchez et al. 1998). Wu and Pollard (2000) find similarly proportionate estimates in Canada with 12% of cohabiters marrying and 12% separating within two years. These percentages rise across time but remain relatively balanced with one another: after five years, 44% of American cohabiters have married and 46% have separated (Lichter et al. 2006). Thus the transition out of cohabitation (whether into marriage or singlehood) tends to be relatively quick and few cohabiting unions continue indefinitely. Indeed, about one quarter of cohabitations end within one year, a third within two years, and half within three years (Bumpass and Sweet 1989; Manning and Smock 1995; Smock and Manning 1997).

Over time the proportion of cohabitations ending in marriage appears to be declining (Bumpass 1995, 1998). For cohorts born between 1953–1957, the percentage of
cohabitations ending in marriage by age 25 was 55% (Schoen and Owens 1992). But for those born between 1976–1982, the percentage of cohabitations ending in marriage by the same age was just 20% (Schoen, Landale, and Daniels 2007). Therefore, despite some variation in findings the broad consensus is that cohabitations are fragile and most end within a few years, either in marriage or separation.

Factors Shaping Cohabitation Stability

One reason cohabitation may be fragile is because it lacks the institutional support and commitment that augment marriage. Marriage confers unique economic advantages (Becker 1991) and married couples benefit from more assistance from their families than cohabiters (Eggebeen 2005; Hao 1996). Marriage also confers emotional advantages on spouses (Waite 2000) and benefits from institutionalization. Marriage is legally defined and the roles and obligations of marriage are clearer and more normative than those of cohabitation (Cherlin 2004; Nock 1995; see also Manning and Smock 2005). Because cohabitation may not confer the same economic, emotional, and institutionalized benefits, cohabiters have fewer ties binding them which in turn may weaken their commitment and undermine union stability. Apart from these differences between cohabitation and marriage, numerous studies document the important role of demographic and economic factors in shaping cohabitation stability.

**Demographic.** Cohabiters have more complex families than married persons in terms of relationship and fertility histories (Goldscheider and Sassler 2006; Manning 2004). This complexity is important because it is positively associated with relationship
instability (Raley and Bumpass 2003; Sweeney and Phillips 2004). Cohabitors with prior marital experience have fewer plans to marry their partners (Bumpass, Sweet, and Cherlin 1991) while cohabiters who were divorced are less likely to marry compared to cohabiters who were widowed (Wu and Balakrishnan 1995). Fertility likely plays a role in cohabitation stability but there is little consensus as to how. Some research finds that residential offspring—regardless of number, age, or gender—have a stabilizing effect on cohabitation by deterring the likelihood of separation and marriage (Wu and Balakrishnan 1995). Other evidence suggests that residential offspring have a destabilizing effect on cohabiters by increasing the likelihood of separation (Sassler and McNally 2003). Still other studies suggest that offspring have a transformative effect on cohabiting unions by increasing the likelihood that cohabiters transition into marriage (Manning and Smock 1995).

Cohabitation stability varies by other demographic characteristics including gender, race, and age. For example, cohabiting women are more likely to marry than cohabiting men while cohabiting men are more likely to separate: about two fifths of cohabiting women separate compared to one half of cohabiting men (Wu and Balakrishnan 1995; Wu 1995; see also Manning and Smock 1995). Cohabitng whites are also more likely to marry than cohabiting blacks (Brown 2000; Manning and Smock 1995). Using the National Survey of Families and Households (which samples mainly 20 to 40 year olds), Brown (2003) finds that age has a positive relationship to frequent relationship interaction and union stability. Using the same data, Brown and Booth (1996) find that age is negatively related to plans to marry among cohabiters. Moreover,
using a sample of primarily 20 year old cohabiters, age is found to be positively
associated with remaining together versus marrying (Wu and Balakrishnan 1995). In
other words, “older” cohabiters (at least among these samples of young and middle-aged
adults) are more likely to have stable unions than younger cohabiters.

Economic. Whether measured as education, employment, or income, economic
resources exhibit a strong positive correlation with either marrying or remaining together
versus separating. In other words, the poorest cohabiters tend to break up while more
advantaged cohabiters stay together while the most advantaged cohabiters marry (Lichter,
Qian, and Mellott 2005; Oppenheimer 2003). Many poorer cohabiters specifically report
that they are delaying marriage until they can meet certain financial prerequisites for
establishing an independent household (e.g., holding a stable job, paying down debt,
being able to afford a house) (Gibson-Davis, Edin, and McLanahan 2004; Smock,
Manning, and Porter 2005).

The relationship between economic factors and cohabitation stability depends on
gender and, importantly, the measurement of resources. If economic resources are
measured using educational attainment, studies find that education increases the chances
that cohabiters marry while deterring their likelihood of separation (Smock and Manning
1997; see also Oppenheimer 2003). Similarly, full-time employment among cohabiters is
positively correlated with marrying and negatively correlated with separating though only
for cohabiting men; cohabiting women’s employment status has no effect on cohabitation
stability (Manning and Smock 1995; Smock and Manning 1997). Thus, economic
resources appear to destabilize cohabitation in one sense—by increasing the likelihood of
marrying—while stabilizing it in another sense—by deterring separation. Compared to those who separate or who are single, cohabitation is selective of individuals in good economic standing while marriage is selective of those in the best economic standing (Oppenheimer 2003).

Using income as a measure of resources, several studies find that cohabiting couples are more likely to marry when the male partner (and only the male partner) has high income (Brown 2000; Sanchez et al. 1998; Smock and Manning 1997). These findings have led to the supposition that cohabiting men with the best economic prospects tend to marry (Brown 2000; Oppenheimer 2003; Smock and Manning 1997). Yet Sassler and McNally’s (2003) findings lead to the opposite conclusion. For cohabiting men, income reduces the odds of marrying and breaking up. In other words, economic resources promote cohabitation stability. Women’s income has no effect on stability at all whether measured individually, additively, or in relation to their male partner’s income (Sassler and McNally 2003). Wu and Pollard (2000), on the other hand, find that income destabilizes cohabiting unions. For cohabiting men and women alike, income increases the likelihood of separating. They conclude that resources have an “independence effect” on cohabiters which weakens the stability of their unions and facilitates singlehood.

**Expectations and Hypotheses for Research Aim 2**

Based on prior research, it appears as though cohabitation is fragile and transitory. Most cohabiting unions end within a few years, either in marriage or separation. Rarely
do cohabiting unions last beyond 4 or 5 years. Should we assume that cohabitation during later life is similarly unstable? Not necessarily.

Recall that nearly 8 in 10 single older women report being disinterested in marriage (Talbott 1998) yet one quarter expresses interest in cohabitation (Bulcroft and Bulcroft 1991). Do older cohabiting women transform their unions into marriages, separate, or stay cohabiting? Given the demographic, economic, and individual settings of older adulthood, it is plausible that cohabiting unions may be more an alternative to marriage than a precursor. If this were the case, later-life cohabitation may be relatively stable and few of these unions may result in marriage, especially among older women.

In comparing younger and older cohabiters, King and Scott (2005) find that older cohabiters are happier, have fewer disagreements, and are less likely to think that they will separate. Older cohabiters also report fewer plans to marry their partner. Among young adults who are cohabiting, having no plans to marry strongly associates with poor relationship quality and high likelihoods of separation (Brown and Booth 1996). Despite having fewer plans to marry one another, older cohabiters are happier, have been together for longer, and have more stable relationships than younger cohabiters (King and Scott 2005). As a result, King and Scott (ibid:271) conclude that “older cohabiters are more likely to view their relationship as an alternative to marriage” than as a prelude to it.

Other studies similarly support the idea that later-life cohabitation may be more stable than cohabiting unions during young adulthood. For example, cohabiters’ age is positively related to relationship quality (Brown 2003) which is an important predictor of union stability (Carlson, McLanahan, and England 2004; Osborne 2005). Moreover,
cohabiters’ age is negatively related to the likelihood of marrying versus continuing to cohabit (Brown 2000). These findings suggest not only that age is a critical factor associated with cohabitation stability, but that cohabitation among older adults may be more stable and longer-lived than cohabiting unions among young adults.

What role might economic resources play in later-life cohabitation stability? According to Becker (1991), women’s economic resources decrease the likelihood of marriage while increasing those of marital alternatives such as cohabitation. High levels of wealth may deter marriage among older cohabiting women either by stabilizing cohabitation or by encouraging separation. Only a few empirical studies support this supposition. Income appears to destabilize cohabitation by increasing the likelihood of separation (Wu and Pollard 2000) while older widows’ resources facilitate singlehood relative to remarriage (Smith et al. 1991). Again, even if wealth were to delay cohabiting women’s transition into marriage, that delay could be synonymous with nonmarriage. The likelihood that older adults marry, and that cohabitations in particular end in marriage, declines sharply with age (Brown et al. 2006; King and Scott 2005). The independence hypothesis therefore may offer some predictive insights: wealth may positively associate with cohabitation stability among older women.

On the other hand, Oppenheimer’s theory may offer insights. According to Oppenheimer (1988, 1994, 1997), resources increase the likelihood of marriage for men and women alike. Resources might have a transformative effect on cohabiting unions by facilitating the transition into marriage. Indeed, several empirical studies support this supposition. The economic resources of cohabiting men tend to increase the likelihood of
marriage (Brown 2000; Manning and Smock 1995; Smock and Manning 1997; Oppenheimer 2003; Sanchez et al. 1998). There is little empirical support for the positive effect of cohabiting women’s resources, however, which appears to be of little significance for cohabitation stability (Sanchez et al. 1998; Sassler and McNally 2003).

Financial transfers, the other component of older adults’ resources, are likely to have similar effects on cohabitation stability as they do on the process of entering marriage and cohabitation among single adults. In other words, financial transfers may discourage the likelihood that cohabiters marry because, as noted earlier, older adults may be uninterested in assuming the financial burden of a potential spouse’s family. Transfers may similarly strain cohabiting relationships by increasing the likelihood of dissolution.

The negative effect of transfers on the likelihood that cohabiters marry could vary by gender. Recall that residential children exert a strong negative effect on older women’s chances of marrying but not on older men’s (Smith et al. 1991; Wu 1995). Thus although transfers may destabilize cohabiting relationships in later life, their negative effect may be present only among older cohabiting women and not among their male counterparts.

**Summary of Hypotheses for Research Aim 2**

Based on theory and past research, I explore the following four hypotheses in Chapter 5 about the stability and economic determinants of cohabitation transitions at older ages.
**Hypothesis 4.** Cohabitation stability is positively associated with age.

**Hypothesis 5.** Later-life measures of economic resources (e.g., wealth, exchanges) are more salient predictors of cohabitation transitions than conventional measures such as education and income.

**Hypothesis 6.** Among older cohabiting women, wealth discourages marriage and encourages separation relative to staying in a cohabiting union. In contrast for older cohabiting men, wealth encourages marriage and discourages separation relative to staying in a cohabiting union.

**Hypothesis 7.** Financial exchanges encourage separation and discourage marriage relative to staying in a cohabiting union. These relationships will be more salient for older cohabiting women than men.
Chapter 3. Methods

Data, Measures and Analytic Strategy

This chapter outlines the data, measures, and analytic strategy used to explore later-life union formation. For both research aims the data, many of the measures, and the analytic strategies are the same. The two analytic samples differ along with some of the variables (e.g., outcomes). Because of the overlap, I discuss the data, measures, and strategies together for both research aims, noting any differences where appropriate.

Data

The study draws on five waves of longitudinal data from the 1998–2006 rounds of the Health and Retirement Study (HRS). These data are collected biennially and constitute a nationally representative sample of over 26,000 noninstitutionalized Americans who are at least 50 years old. The HRS began with four cohorts of Americans: Asset and Health Dynamics Among the Oldest Old (born 1923 and earlier), Children of the Great Depression (born 1924–1930), the original HRS (born between 1931–1941), and War Babies (born 1942–1947). Every six years, the HRS adds another cohort to the
interview schedule. Thus in 2004, Early Baby Boomers (born 1948–1953) were first interviewed.¹

The HRS focuses on older adults which makes it ideal for the current study. One reason for the paucity of research on older adults’ union formation is the lack of large-scale surveys that allow for sufficient sample sizes especially of older cohabiters (Chevan 1996). For example, de Jong Gierveld’s (2004) study based on data from the Netherlands examines 48 older cohabiters and 69 older remarried individuals. King and Scott’s (2005) work in the United States has a similarly sized sample of 76 older cohabiters.

The HRS is also suited to the current study because it collects longitudinal information on relationship experiences, including marriage and cohabitation. When respondents first enter the survey, they give retrospective reports on marital and cohabitation experiences prior to the survey.² After entering the survey, the HRS collects information for both unions biennially. These histories make possible a longitudinal analysis of later-life union formation. The data contain detailed information on respondents’ economic resources including wealth and financial transfers, as well as

1 In 2010, the Mid Boomers (1953–1960) are scheduled to be surveyed.

2 This retrospective information includes dates for the three most recent marriages, but not for any cohabiting unions unless the respondent enters the survey already cohabiting. In this case, respondents are asked to report on their current cohabiting union. Otherwise, retrospective information available on cohabitation experience is limited to whether a respondent cohabited at some point prior to entering the survey.
information on other important factors such as respondents’ age, race, health, family coresidence, and frequency of interaction with family and friends.

**Analytic Samples**

**Research Sample 1.** The first research aim explores the timing, prevalence and economic determinants of entering marital and cohabiting relationships among single older adults. First, to be included in Research Sample 1 respondents must be single when they first enter the survey or become single during the period of observation from 1998 to 2006. Thus respondents in the sample can be never married or previously married (e.g., widowed, divorced). Research Sample 1 excludes respondents who are continuously married and those who enter the survey already married or cohabiting (regardless of whether it is a first or subsequent marriage). The sample is therefore left truncated because it excludes subjects that have not survived long enough to be observed in the data.

For example, a man could divorce in 1989 and remarry in 1996 but he would be excluded from the sample because his repartnering occurred outside of the observation period. The consequence is that Research Sample 1 is selective because it tends to exclude high-risk cases (individuals who are younger, male, employed, and divorced) while containing a disproportionate number of low-risk respondents (individuals who are older, female, widowed, and retired). I further discuss the potential bias that arises from left truncation in the analytic strategy and in the conclusion.
Second, to be included in Research Sample 1 respondents must be observed for at least two waves to track potential changes in union status. After excluding respondents who do not fit these two criteria (single and observed for two waves), the sample size for Research Sample 1 is 10,451 single individuals who are at least 50 years old.3

**Research Sample 2.** The second research aim explores the timing, prevalence, and economic determinants of cohabitation transitions among older cohabiters. To be included in Research Sample 2, respondents must report being in a cohabiting relationship during one of the survey waves. Here cohabitation is defined as a heterosexual, romantic union in which two individuals share a residence but are not married to one another. Cohabitation is distinct from marital status in that cohabiters can be divorced or separated but still cohabiting with a partner. Like other individual characteristics (e.g., race, health), cohabitation status is self-reported. In other words, respondents must self-identify as having a cohabiting partner or being in a cohabiting relationship.

Respondents in Research Sample 2 can either enter the period of observation already in a cohabiting relationship or they can begin cohabiting during one of the

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3 They contribute 52,255 person-years to the analysis. Individuals remain in the sample until they marry, cohabit or are censored due to attrition or death. Thus individuals remain “at risk” of experiencing marriage or cohabitation only once and then are removed from the sample if they do so.
periods of observation. As in Research Sample 1, individuals must be observed for at least two waves to track potential changes in cohabitation status. Thus respondents who enter cohabiting unions for the first time in 2006 are excluded from Research Sample 2 because their unions cannot be observed for more than one wave.

Because of the structure of the HRS, intra-wave cohabitations are not captured (i.e., those unions that begin and end between survey waves). In other words, relationship

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Some of these cohabitations were not observed at their inception: 289 cases (21.6% of Research Sample 2) were already cohabiting when first observed. These individuals were technically at risk of dissolving their unions the moment that they began cohabiting (i.e., when they were not observed). Research Sample 2 is therefore left truncated, as is Research Sample 1.

Bias due to left-truncated data can be minimized (Guo 1993) and I discuss this further in the analytic strategy. In supplemental analyses, I also experimented with various length-based samples to test whether left truncation affects parameter estimation. For Research Sample 1, I excluded individuals who had been single for longer than 30 years, 20 years, and 10 years. For Research Sample 2, I excluded cohabiters who entered the survey already cohabiting. In other words, left-truncated cases were discarded which is a common solution to handling left truncation because the resulting samples are not biased (Allison 1982). In both cases, parameter estimation of the chief predictors does not vary substantially from results presented here. Discarding left-truncated cases results in a loss of sample size, however. Because of small cell sizes, the statistical significance of some controls changes.
information is collected only for cohabitations that are “observed” during at least one survey wave, even if that cohabitation began or later ends—but not both—between waves. The data (and sample) are therefore upwardly biased toward cohabiting unions of longer duration. As a result, life table estimates should be interpreted cautiously because they likely omit short-term cohabitations. I further discuss in the conclusion this important data limitation and sample bias. In sum, Research Sample 2 contains 1,336 cohabiting individuals who are at least 50 years old.5

Outcome Variables

Research Sample 1: Partnering. The outcome variable for the first research aim is partnering experience. Using information on respondents’ union formation, I construct an event history of coresidential unions between 1998 and 2006. Partnering is a time-varying dummy variable that measures whether individuals remain single, marry, or cohabit. Individuals are “at risk” of partnering while they remain single but are no longer at risk once they cohabit or marry.

Research Sample 2: Cohabitation Transitions. Using information on respondents’ relationship experiences, I construct an event history of coresidential unions. The outcome variable is the “fate” of a cohabiting union, whether older cohabiters experience a union transition from one year to the next. Cohabitation transition

5 In both research samples, most variables have no more than 4–5% missing cases. One important variable, time since marital dissolution, has about 11% missing. Experimentation with multiple imputation did not change the results presented here.
is a time-varying dummy variable that measures whether older cohabiters remain cohabiting, transform their cohabitation into marriage, or break up/dissolve their cohabitation by returning to singlehood. The analyses treat these transitions as competing risks (see analytic strategy). Thus cohabiters remain “at risk” of experiencing a transition until they marry, separate, or are censored from the data due to attrition or death.

Technically, a cohabiting union ends when individuals either marry or separate. Yet these two transitions represent very different kinds of “ endings” to the cohabiting union. For example, the cohabitation that ends in marriage is essentially transformative: Partners remain together and convert or change their informal cohabitation to a formal marriage. In contrast, the cohabitation that ends in separation is a dissolution: Partners terminate the union and separate from one another. To differentiate these two transitions, I use “transform” to refer to cohabitations that transition into marriage and “dissolution” for those that end in separation. Thus predictors that have a “transformative” influence on cohabitation stability are positively associated with transitioning into marriage. Predictors that have a “destabilizing” influence are positively associated with cohabitation dissolution/separation. And predictors that have a “stabilizing” influence on cohabiting unions are negatively associated with marrying or with separating (i.e., these factors encourage staying in a cohabiting union).

**Predictors: Economic Resources**

The primary predictors for both research aims are economic resources. The study uses two kinds of measures to capture economic resources. The first kind is conventional
measures that are commonly found in studies on young adults’ union formation (e.g., education, income). The second is measures salient for older adulthood (e.g., wealth, financial transfers, income provision). Note that descriptive statistics for predictors and controls are shown in Table 1 (Research Sample 1) and Table 5 (Research Sample 2).

**Conventional Measures.** I construct two continuous variables for conventional measures of economic resources. (1) Education is a time-constant variable of respondents’ highest educational attainment (measured in years). This variable is measured the first year that respondents enter the survey. The mean of education for the whole sample is about 11.5 years and 12 years (for Research Samples 1 and 2, respectively). (2) Income is a time-varying measure of respondents’ personal yearly income (if any). It includes income from wages and salaries (for up to two jobs), tips, bonuses, and overtime pay (for up to two jobs), and professional practice and trade income.\(^6\) The variable is logged to correct for skew. The average income of respondents is about $7,500 and $19,500 (for Research Samples 1 and 2, respectively).

**Later-Life Measures.** To measure later-life economic resources, I use three time-varying variables. (1) Wealth is a continuous variable that is constructed by combining the value (in U.S. dollars) of respondents’ financial and nonfinancial assets.\(^7\) Importantly, this variable does not include monies earned from rents, trust funds and royalties, or dividends and interest income from stocks, bonds, and other assets.\(^6\) Wealth and income are undoubtedly related to one another: persons with higher incomes are likely to have more wealth as well. The two variables are modestly correlated, though (.19).

\(^6\) This variable does not include monies earned from rents, trust funds and royalties, or dividends and interest income from stocks, bonds, and other assets.

\(^7\) Wealth and income are undoubtedly related to one another: persons with higher incomes are likely to have more wealth as well. The two variables are modestly correlated, though (.19).
the variable specifically measures net worth, that is the value of an asset less any debt, lien, or balance due. Financial assets include the value of respondents’ pensions and retirement accounts (up to three), checking and savings accounts, certificates of deposit, bonds, and Treasury bills. In other words, financial net worth captures assets that are relatively liquid. Nonfinancial assets include chiefly the value of respondents’ real estate (primary and secondary residences) as well as transportation, jewelry, artwork, and other durable goods. Nonfinancial net worth captures the value of assets that are relatively fixed or nonliquid.

The composite measure of wealth is therefore the sum of respondents’ financial and nonfinancial net worth. Respondents with no net worth are treated as having zero wealth. To correct for skew, I add a constant to the variable and log it. For Research Sample 1, on average the total wealth of respondents is about a quarter million dollars with about $78,000 in financial assets and $150,000 in nonfinancial assets. For Research Sample 2, average total wealth is about $326,000 with around $86,000 in financial assets and $239,000 in nonfinancial assets.

To measure exchanges, I construct two time-varying dummy variables. (2) Financial transfer measures whether respondents gave at least $500 to a child, sibling, or parent within the past year. The reference category is respondents who did not make a transfer totaling at least $500. In both samples, about one third of respondents have engaged in financial transfers. (3) Income provision captures more substantial transfers to family members. It measures whether respondents provided at least half of the income for
a child, parent, or sibling within the year prior to interview. The reference category is respondents who did not engage in income provision with any of these family members. Compared to financial transfers, income provision is rarer: in both samples, about 6% of respondents provided half of a family member’s income.

Controls

Cohabitation Duration. Cohabitation duration contributes to the stability of cohabiting unions by deterring marriage and separation (Brown 2000). Further, older

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8 Financial transfer and income provision may be correlated because a respondent who provides half of the income for a family member is likely to have transferred at least $500 to the same person. These two variables are modestly correlated (.24). In supplemental analyses (not shown), I modeled these variables one at a time to ascertain whether their correlation influenced parameter estimation. Income provision rarely attained statistical significance either with or without financial transfers in the model (the percentage of respondents engaging in income provision is quite small, as noted).

Unfortunately, a more detailed assessment of financial transfers and income provision is difficult to construct. The HRS does collect the specific amount transferred but only to respondents’ children. The survey does not inquire about the amount of transfers to other family members. Moreover, the HRS does not collect information on the frequency of transfers to any family member nor the specific amount involved in “providing a family member with half of his income.” I discuss in the conclusion these data limitations and their potential implications.
cohabiters typically have been in their relationships longer than younger cohabiters (King and Scott 2005). Using information from respondents’ relationship histories, I construct a time-varying continuous measure of cohabitation duration (or longevity) measured in years. (Besides being an important control, this variable allows for life table estimates of cohabitation survival; see the analytic strategy below.) To capture potential curvilinearity, I include a quadratic for cohabitation duration in the multivariate analyses. Because only the second research aim deals with cohabitation stability, these two variables (cohabitation duration and its square) do not appear in the analyses for the first research aim. The average cohabitation duration for the whole sample is about three years.

**Age.** The likelihood of entering a new union from singlehood declines with age (de Jong Gierveld 2004; Wu and Balakrishnan 1994). A person’s age positively affects cohabitation stability, as well (Brown 2003; Brown and Booth 1996; Wu and Balakrishnan 1995). To capture respondents’ age, I use a time-varying continuous variable measured in years. Respondents are 71 years old on average in Research Sample 1 and about a decade younger, 60 years old, in Research Sample 2.

**Time Since Marital Dissolution.** The likelihood of entering a new union from singlehood declines across the amount of time that individuals have been widowed or divorced (de Jong Gierveld 2004; Wu and Balakrishnan 1994). A time-varying continuous variable measures the number of years since widowed and divorced respondents exited their most recent marriage. To capture potential curvilinearity, I include a quadratic for time since marital dissolution in the multivariate analyses. These
two variables (time single and its square) appear only in the analyses for the first research aim. On average, respondents have been single for about 15 years.

**Gender.** Gender is a time-constant dummy variable that is measured when respondents first enter the survey. Older women make up roughly three quarters of Research Sample 1 but one half of Research Sample 2, consistent with estimates that men are disproportionately represented among older cohabiters (Chevan 1996).

**Marital History.** Widowed persons are less likely to marry than the divorced (Chevan 1996; de Jong Gierveld 2002) while divorced cohabiters are more likely to marry than widowed cohabiters (Bumpass et al. 1991; Wu and Balakrishnan 1995). Three time-constant dummy variable measures whether respondents are never married, divorced, or widowed (reference category). Marital history differs between the two research samples. In the first, roughly 30% is divorced, 60% widowed, and 10% never married. In the second sample, 60% is divorced, 24% widowed, and 16% never married. Thus, the widowed are disproportionately represented among single older adults while the divorced are disproportionately represented among older cohabiters (Chevan 1996).

**Race/Ethnicity.** Because racial/ethnic minorities exhibit different patterns of union formation than whites (Brown 2000; Manning and Smock 1995; Raley 1996), a time-constant dummy variable captures whether respondents are white or nonwhite (reference category). In both samples, roughly one third of respondents are nonwhite.

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9 A more nuanced measure of race/ethnicity is possible but problematic. In both samples, roughly 20% of respondents self-identify as black, 8% Hispanic, and 2% another race/ethnicity. Because the analyses are separated by gender and age (see the
Health. Health underlies expectations about mortality and morbidity, and older adults may view poor health as a deterrent to union formation (Bulcroft and Bulcroft 1991). Moreover, older cohabiters may be selective of poor-health individuals (Brown et al. 2005). A time-varying self-rated variable measures respondents’ health as good, fair, or poor (reference). In Research Sample 1, 33% of respondents report being in good health, 54% fair, and 13% poor. In Research Sample 2, 40% report being in good health, 48% fair, and 12% poor.

Residence and Network Contact. I use two variables to measure the potential effects of offspring and family contact on union formation (Hatch 1995). (1) Residential offspring is a time-varying dummy variable that measures whether respondents share a household with at least one child (reference category is no). Roughly one quarter and one fifth of respondents report living with offspring (in Research Samples 1 and 2, respectively). (2) A time-varying dummy variable assesses older adults’ network contact. High network contact is defined as having both close friends and family who live nearby in the same neighborhood. The reference category is low network contact which is defined as not having friends and family who live nearby. About half as many respondents (13%) report high network contact in Research Sample 2 as in Research Sample 1 (23%).

analytic strategy), cell sizes for disaggregated racial/ethnic categories are too small to yield reliable covariate estimates. To preserve cell sizes, I use the aggregated measure of white/nonwhite. Doing so treats nonwhites as a racial/ethnic amalgamation which masks variation in union formation, a drawback of small sample sizes.
Analytic Strategy

Two analytic strategies are used to examine the timing, prevalence, and economic determinants of later-life union formation. The first method is discrete-time multinomial logistic regression and the second method is life tables. The study also uses several modeling strategies and sensitivity tests.

**Discrete-Time Multinomial Logistic Regression.** For both research aims, the study uses discrete-time multinomial logistic regression to model the relative risks of union formation. In other words, singlehood, cohabitation, and marriage are treated as competing risks. This method is appropriate for several reasons. It avoids proportionality assumptions (Allison 1984), permits both fixed and time-varying covariates (Yamaguchi 1991), and models predictors separately by transition type. The latter is important because the effects of covariates on union formation may differ depending on which union types older adults experience.

Importantly, discrete-time models minimize potential biases that arise from left-truncated data (Guo 1993). Data are left-truncated when some subjects come under observation after having been exposed to the risk of experiencing an event for a given period (as is the case with these data, see footnote 4, p. 42). The problem then is one of sample selection. Left-truncated data contain subjects with lower risks at short durations because high-risk subjects tend to experience the event and drop out of the sample prior to observation. Left-truncated data over represent low-risk cases while under representing high-risk cases, which can bias parameter estimation because the risks associated with experiencing an event tend to be underestimated (Guo 1993). If exposure time is known
(i.e., the date of marital dissolution), however, then the bias can be effectively minimized. Using discrete-time models that include duration of exposure at the start of observation and over the course of observation has been shown to minimize the bias caused by left-truncated data (Guo 1993).

**Life Tables.** To examine later-life cohabitation transitions (results presented in Chapter 5), I use life tables to examine survival rates of cohabiting unions over time. Life tables calculate the percentage of cohabiting unions that are still intact or the percentage that has “survived” after a given period. Using this method helps illustrate the durability of cohabiting unions and the timing of cohabitation transitions among older adults.

**Modeling and Sensitivity Tests.** Results from multinomial logistic regressions are performed separately by gender and age category. I use this strategy because older men and women face different marriage markets. Variables related to union formation also vary markedly by gender (e.g., economic resources, widowhood, age, health). Men and women typically have different patterns of cohabitation transitions, as well (Manning and Smock 1995; Wu and Balakrishnan 1995; Wu 1995). Tables showing results from multinomial logistic regressions are organized similarly across chapters: the top panel of the tables (Panel A) shows results for older women while the bottom one (Panel B) shows results for older men.

In addition to gender, analyses are performed separately by age category: persons 50–64 years old at the time of risk (who represent potential early retirees), and persons aged 65 and older at the time of risk (who represent traditional retirees). I separate analyses by these two age groups for two reasons. First, their life course experiences
differ in important ways that may be related to union formation. For example, the younger group is typically in better health, still employed, and may have college-aged or younger children who are living at home or who rely on respondents for financial transfers and income provision. The younger group also has had less time to accumulate wealth. The older group faces rising likelihoods of morbidity and widowhood, and reductions in income via retirement. Further, the older group has had more time than the younger group to accumulate wealth through capital appreciation and asset acquisition.

Second, although many of the differences between these two age groups are related to employment, it is important to run analyses separately by age (and not retirement status, for example) because of differences in partner availability. Sex ratio imbalances among older adults grow increasingly pronounced through the late 60s and 70s (National Center for Health Statistics 2008; see also Chevan 1996, Goldman et al. 1984). An sex-ratio imbalance greatly shapes older adults’ ability to find heterosexual partners.

Because analyses are run separately by gender and age, it is helpful to know whether parameter estimates significantly differ not just within a given model but across models as well (i.e., across genders and age groups). To determine statistical significance across genders, I include an interaction between the variable of interest and female in an analysis that is restricted by age group but not gender (for example, comparing 50–64 year old men and women). To determine significance across age groups, I include an interaction between the variable of interest and a dummy for age group in an analysis that is restricted by gender but not age (for example, comparing women who are 50–64 years
old with women who are 65+). Significant differences (that are at least \( p < .10 \)) are reported in the tables based on the significance of these interactions. Because the study focuses on economic determinants, cross-model significance differences are tested for the primary predictors only (see Tables 2 and 3, and Tables 6 and 7 for more information).

Across all of the multinomial logistic regressions, the results are presented in two models. Model 1 includes traditional measures of resources (education and income) as well as controls. Model 2 retains these measures and introduces measures of later-life economic resources (total wealth, financial transfers, and income provision). The two-step process allows one to assess the effects of later-life resources on union formation net of education and income while controlling the remaining variables in the analyses.

Results may be sensitive not only to gender and age but to wealth type as well. Financial wealth is relatively liquid and thus easier to draw upon whereas nonfinancial wealth is more valuable but more difficult to convert to cash. Being asset rich in terms of housing but asset poor in terms of financial wealth may mean two different things for union formation, especially if older adults view housing as an important component of financial security and independence (Hatch 1995). To assess sensitivity by wealth type, Tables 4 and 8 summarize results from supplemental analyses that disaggregate wealth into its two components, financial and nonfinancial wealth.
Chapter 4. Results

Timing, Prevalence, and Economic Determinants of Marriage and Cohabitation Among Single Older Adults

Summary Statistics

This chapter presents results for the first research aim: exploring the economic determinants of entering marriage and cohabitation among single older adults. Most of the sample (Research Sample 1) remains single during the period of observation with about 1 in 10 single older adults entering a union, though this varies by gender and age (Table 1). Whereas the incidence of partnering among younger men (50–64 year olds) is 2 in 5, the incidence among older women (65+) is 1 in 25. Overall, at least twice as many men marry or cohabit compared to women and among those 65 and older the gender difference is starker: four times as many men marry, three times as many cohabit.

Economic resources vary by gender and age. Overall, 50–64 year olds are better educated and have higher incomes than their older counterparts, regardless of gender. Yet it would be misleading to rely on income for a complete portrait of older adults’ economic resources. Although older adults’ incomes are small, their wealth is substantial. The typical woman aged 65 and older has an average income of only $1,738, about one
tenth the size of her younger counterpart.\footnote{This difference is due largely to employment patterns. In supplemental summary statistics (not shown), the percentage of older women in the labor force differs markedly by age category. About 11\% of women 65 and older are employed (whether part time or full time), whereas 59\% of their younger counterparts are employed.} Her average net worth, however, totals $208,950—significantly more than her younger counterpart. Older men and women alike have greater wealth on average than 50–64 year olds. Compared to the older age group, a higher proportion of 50–64 year olds makes transfers to family and twice as many provides at least half of the income for a family member.

Figures 1–2 illustrate the composition of older adults’ economic resources by partnering experience, gender, and age. Figures 3–4 show the percentage of older adults who engage in any kind of financial exchange with family members. From these figures, we can draw five noteworthy trends.

First, income makes up a fraction of older adults’ total resources relative to their wealth, although income comprises a greater proportion of 50–64 year olds’ resources. Among women and men who are at least 65 years old, income makes up no more than 1.1\% and 1.6\%, respectively, of their total resources. Among their younger counterparts, income makes up no more than 9.5\% of total resources (see Figures 1 and 2). Thus the bulk of older adults’ economic resources are reflected in their financial and nonfinancial assets.

Second, regardless of age older women who stay single between 1998 and 2006 are economically disadvantaged compared to women who cohabit or marry during this
period. Relative to women who remain single, women who cohabit typically have 50% more economic resources while women who marry have about twice as many resources (Figure 1). Thus older women who remain single have fewer resources than women who enter any kind of union. Among older men, this same pattern depends on age: only among the older age group (65+) are men who remain single economically disadvantaged compared to their counterparts who cohabit or marry. The economic resources of 50–64 year old men are similar across partnering experiences (Figure 2). These patterns illustrate that later-life singlehood is typified by economic disadvantage. That disadvantage, though, is more widespread among single women in that it characterizes both younger and older age groups.

Third, single older adults who marry have more wealth than those who cohabit regardless of gender and age (Figures 1 and 2). Interestingly, the incomes and financial wealth of single older adults who cohabit or marry are statistically similar to one another. Only the nonfinancial wealth of those who marry is greater than the nonfinancial wealth of those who cohabit. When housing wealth is excluded from nonfinancial assets (in supplemental analyses not shown), this statistically significant difference disappears. Thus, older adults who marry have more wealth than those who cohabit, on average, because they own more valuable real estate. This trend is consistent across older men and women, regardless of age, and highlights the potential importance of housing assets for later-life partnering.

Fourth, financial transfers are far more common than income provision among single older adults, regardless of gender or age (Figures 3 and 4). At least 25% (and up to
40%) of single older adults has made a financial transfer in the year prior to interview compared to no more than 11% that has engaged in income provision. Nevertheless, income provision is more common among 50–64 year old men and women than among their older counterparts. Relative to those who are at least 65, the percentage of 50–64 year olds engaging in income provision is between 50–100% greater. Thus, the financial burden of family members appears to be more prevalent among the younger age group of single adults than among their older counterparts.

Fifth, a higher percentage of older adults who marry or cohabit engages in any kind of economic exchange compared to older adults who remain single, regardless of gender and age (Figures 3 and 4). Judging by the relative economic disadvantage of older adults who remain single (see Figures 1 and 2), it is possible that they engage in fewer exchanges precisely because they have fewer resources. Nevertheless, single older adults who enter any kind of union are disproportionately likely to make financial transfers or provide at least half of the income for a family member.

**Multivariate Analyses: Partnering Among Single Older Adults**

Time plays an important role in later-life union formation though that role differs largely by age group. Among 50–64 year olds, the time that individuals have been single has no statistically significant relationship with women’s risk of union formation (Panel A, Table 2). For men, time single has a significant negative relationship: a one-year increase in time single is associated with .95 and .93 times the risk of cohabiting versus staying single or marrying, respectively (Panel B, Table 2). In other words, time single
for 50–64 year old men decreases their risk of cohabiting. The significant and positive squared term suggests that the association between time single and older men’s partnering is not linear. Rather, it attenuates over time.

Among single adults who are 65 and older (Table 3), time single has a significantly different relationship with union formation than it does for 50–64 year olds. Among women who are at least 65, time single decreases the risk of entering any kind of union (marriage or cohabitation): a one-year increase in time single is associated with .92 times and .95 times the risk of marrying or cohabiting, respectively, versus staying single (Panel A, Table 3). These effect sizes are statistically similar for single men who are at least 65 (Panel B, Table 3). In other words, the longer that the oldest adults remain single, the less likely they are to enter any kind of union. This result is consistent with findings from previous research (Brown et al. 2006) showing that time since last union negatively associates with partnering. If older adults in this age group do partner, time single is not significantly associated with their risk of cohabiting versus marrying.

**Conventional Measures of Economic Resources.** Model 1 in Table 2 (50–64 year olds) and Table 3 (65+) presents results using education and income to predict the relative risk that single older adults marry, cohabit, or stay single. Their associations with partnering are gendered and contradictory. Among 50–64 year old women, education decreases the risks of partnering (marrying or cohabiting) compared to staying single. Income also increases the risks of staying single and cohabiting versus marrying (Panel A, Table 2). Thus, greater financial resources appear to be positively associated with marital alternatives such as singlehood and cohabitation.
Nonetheless, this theme is not entirely clear because in two instances education and income have opposite effects on partnering. Among women 65 and older, education increases the risks of marrying versus staying single (a significant difference from the effect of education for 50–64 year old women) while income decreases them (Panel A, Table 3). Among women 50–64, education decreases the risks of cohabiting versus marrying while income increases them (Panel A, Table 2). Therefore, in some cases financial resources are positively associated with marriage relative to singlehood or cohabitation; in other cases, they are negatively associated with marriage.

Among older men, the results are less contradictory because education and income have almost no significant relationship with partnering. Among men 50–64, education and income never attain statistical significance for any kind of partnering (Panel B, Table 2). Only among men 65 and older does education significantly and positively associate with marrying versus staying single (Panel B, Table 3), an effect that is significantly different from the effect of education for 50–64 year old men. Thus, single men who are 65+ and have higher levels of education are more likely to marry than stay single compared to single men with less education.

In sum, traditional measures of economic resources have almost no relationship with older men’s partnering experience—not what one would expect from either Becker or Oppenheimer’s theories, or from past research. Results for older women are also unclear because they offer contradictory support for both theories.

**Later-Life Measures of Economic Resources.** Results change dramatically in Model 2 which introduces later-life measures of economic resources (wealth, transfers,
and income provision). Two gestalt findings emerge from Model 2 in Tables 2 and 3. First, the addition of later-life economic resources reduces to nonsignificance the effects of education and income from Model 1. Wealth and exchanges therefore appear to be more salient predictors of partnering among single older adults than education or income. Second, regardless of gender or age, single older adults with greater wealth are more likely to marry or cohabit than stay single. Thus, financial resources are positively associated with partnering among single older men and women alike.

Among single women 50–64 years old, each logged unit increase in wealth is associated with 1.11 and 1.06 times greater risk of marrying and cohabiting, respectively, than staying single (Panel A, Table 2). At older ages, the effects are significantly more pronounced (note the bolded relative risk ratios for wealth). The risks of marrying or cohabiting compared to staying single are 1.34 and 1.16 times greater, respectively, per logged unit increase in wealth for women who are at least 65 (Panel A, Table 3). Recall that in Model 1 the effects of education and income were significant for both age groups of women. With the addition of later-life economic measures in Model 2, those effects no longer attain significance. Interestingly, for neither age group of women does wealth associate with the risk of cohabiting versus marrying. In other words, if single older women partner their chances of cohabiting versus marrying do not depend on their economic resources.

Among both age groups of women, transfers to family have similar effects on partnering, though the effects are significantly greater among women who are 65+. Having made a financial transfer within the previous year reduces the likelihood of
marrying versus staying single by about one third for women who are 50–64 years old and one quarter for women who are 65 and older. Transfers have no significant effect on cohabiting versus staying single, though they have pronounced effects on whether older women marry versus cohabit. Single women who are 50–64 years old and who made transfers to family are 1.76 times more likely to cohabit than marry while their older counterparts are 2.19 times more likely to cohabit than marry (a significant difference). Unlike the effects of transfers, income provision does not attain significance for older women regardless of age.

Recall that in Model 1 education and income had almost no significant effect on single older men’s partnering. The same is not true for wealth. Each logged unit increase in wealth for 50–64 year old single men is associated with 1.11 and 1.07 times greater risk of marrying or cohabiting, respectively, than staying single (Panel B, Table 2). Among men 65 and older, the results are nearly identical and are statistically indistinguishable from the effects of wealth for 50–64 year old men. Wealth is the only later-life measure that has a statistically significant association with partnering. Neither financial transfers nor income provision attains significance for older men, regardless of age. Statistically similar to the effects for women, wealth does not associate with the risk of cohabiting versus marrying for single older men, regardless of age.

Whereas wealth has similar effects on older adults’ partnering across genders and age categories, financial transfers are significantly associated with partnering only for older women. Results from Model 2 offer a very different finding (with greater consensus) on the relationship between economic resources and the chances of entering
marriage and cohabitation in later life from the findings in Model 1. Overall, these results closely align with Oppenheimer’s theory of marriage timing while providing no evidence in support of Becker’s independence hypothesis. Are these results sensitive to how wealth is measured?

**Sensitivity Test: Wealth Type and Partnering**

Table 4 compares the effects of financial and nonfinancial wealth on the relative risks of single older adults marrying, cohabiting, and remaining single. Total wealth is provided as a reference and is taken from Model 2 (in Tables 2 and 3). Results for financial and nonfinancial wealth are from separate analyses with the full model. For older women, regardless of age, the effects of financial and nonfinancial wealth on partnering are similar to the effects of the combined wealth measure (Panel A, Table 4). In other words, the results are *not* sensitive to wealth type for single older women.

For single older men, the results are sensitive to wealth type. Only nonfinancial wealth has a significant positive effect on partnering. This finding suggests that the positive effect of total wealth for both age groups of men is driven by the value of their nonfinancial assets. Financial holdings have no statistical relationship with partnering for single older men. When nonfinancial wealth is further disaggregated into housing and other nonfinancial assets (not shown), the positive effect remains just for housing wealth. *Thus, single older men’s partnering experiences are driven not by their wealth in general but by the value of their real estate specifically.* Single older men with more valuable property holdings are more likely to marry or cohabit than to stay single. In comparison,
increases in any kind of wealth (liquid and nonliquid) for single older women raise the risk of partnering relative to staying single.

Summary of Findings

Several important findings emerge from this chapter’s analyses on partnering among single older Americans.

(1) About 1 in 10 single older adults marries or cohabits during the 8-year observation period though this incidence varies by age and gender. Whereas 2 in 5 younger men (aged 50–64) partners during the period of observation, only 1 in 25 older women (aged 65+) partners. Thus, the incidence of partnering is highest among the youngest age group (50–64 year olds) and among single men, in particular.

(2) Among 50–64 year olds, time single decreases men’s risk of cohabiting over staying single or marrying. Among adults 65 and older, time single decreases the risk of entering any union compared to staying single. If older adults do partner, then time single does not associate with their chances of cohabiting versus marrying. Thus, time single has a statistically similar negative effect on later-life partnering among the oldest adults regardless of gender.

(3) Consistent with Hypothesis 1, the addition of later-life economic resources (e.g., wealth, financial transfers, income provision) renders statistically insignificant the effects of education and income on later-life partnering. This finding remains consistent across age groups and genders.
(4) Older adults with greater wealth are disproportionately likely to enter any kind of union, whether marriage or cohabitation, than they are to stay single. This finding is inconsistent with Hypothesis 2 and instead supports the idea that wealth is positively associated with union formation among single older men and women alike. Moreover, wealth is not associated with the risk of cohabiting compared to marrying. This finding is also inconsistent with Hypothesis 2. Instead, the findings here support the idea that if older adults enter unions in later life, they have similar likelihoods of cohabiting as they do of marrying regardless of their levels of wealth.

(5) The effect of financial transfers on partnering is highly gendered. Consistent with Hypothesis 3, transfers discourage marriage while increasing the risk of cohabiting versus marrying for single older women, regardless of age. For older men, transfers are not significantly related to any kind of partnering, regardless of age (again consistent with Hypothesis 3).

(6) The positive relationship between older men’s wealth and the likelihood of partnering is driven entirely by their housing wealth. Single older men with more valuable property holdings are more likely to enter any kind of union—marriage or cohabitation—than they are to remain single.
Chapter 5. Results

Timing, Prevalence, and Economic Determinants of Cohabitation Stability and Transitions Among Older Adults

Summary Statistics

This chapter presents results for the second research aim: exploring the economic determinants of cohabitation stability and transitions at older ages. Table 5 shows summary statistics of older cohabiters by gender and age group. There are several notable trends.

First, cohabiters in the 50–64 year old group are better educated and have higher incomes on average than those who are 65 and older. Differences in income are stark. Younger female and male cohabiters have yearly incomes that are nearly 7 and 8 times larger, respectively, than their older counterparts.\(^\text{11}\) Relying on income alone as a stock of older cohabiters’ resources would be misleading, however. The average income for the whole sample is $19,637 compared to an overall net worth of $326,803. In other words,

\(^{11}\text{As in Research Sample 1, the proportion of employed respondents differs substantially by age group. About 66\% of younger cohabiters (50–64 year olds) works for pay whereas only 14\% of their older counterparts (65+) does so.}\)
the value of older cohabiters’ savings and assets dwarfs their income. Cohabiters in the older age group have significantly more wealth than cohabiters in the 50–64 year old group, regardless of gender, although female cohabiters who are at least 65 have less wealth than their same-age male counterparts. Roughly 1 in 3 older cohabiters made a financial transfer to family in the year prior to interview. Only about 1 in 16 made transfers substantial enough to provide half of a family member’s income.

Second, cohabitation duration for the whole sample is just over three years, though this average differs by gender and age. Cohabiters who are 65 and older have been cohabiting for about 50% longer than their younger counterparts: cohabitation duration among the oldest women is almost four years (compared to 2.69 for younger women) and three and a half years among the oldest men (compared to 2.42 for younger men). Younger cohabiters, men more so than women, tend to be in cohabitations of the shortest duration. Older cohabiters, women more so than men, tend to be in cohabitations of the longest duration. (I discuss these differences in more detail below; see the survivor curves generated from life table estimates.)

Third, compared to Research Sample 1, this sample tends to be younger on average (by about a decade). And whereas older women comprised two thirds of Research Sample 1, they make up just half of Research Sample 2. These trends are consistent with past findings that the population of single older adults is disproportionately female whereas older men are more likely to be in a marital or cohabiting union (Brown et al. 2006; Chevan 1996; de Jong Gierveld 2004; Wu and Balakrishnan 1994).
Table 5 shows that economic resources among older cohabiters differ by gender and age category. Figures 5–8 illustrate how economic resources differ by cohabitation transition, as well (i.e., whether cohabiters marry, separate, or remain together). The figures show the average economic resources for each of these three groups of cohabiters prior to their transition (or censoring in the case of cohabitations that remain intact). In line with the summary statistics in Table 5, Figures 5–8 show the economic resources of each cohabitation transition by gender and age category.

Older cohabiters who separate are by far the most economically disadvantaged. Regardless of gender and age category, cohabiters who separate have smaller incomes and less financial and nonfinancial wealth than either cohabiters who marry or cohabiters who remain together (Figures 5 and 6). For example, 50–64 year old cohabiting women who separate have $194,000 in total resources compared to $291,000 and $597,000 for their same-age female counterparts who stay cohabiting or who marry, respectively (Figure 5). Similarly, the oldest (65+) cohabiting men who separate have $265,000 in total resources compared to $470,000 and $716,000 for their same-age male counterparts who stay cohabiting or who marry, respectively (Figure 6).

Cohabiters who remain together are economically disadvantaged compared to those who marry, with one exception. Among the oldest (65+) cohabiting women, there is no statistically significant difference in the total resources of those who remain cohabiting and those who marry (Figure 5). Among cohabiting men who are at least 65, the difference is starker (Figure 6). Although their incomes and nonfinancial wealth are statistically similar, older men who marry have financial wealth that is 2.75 times greater
than older men who stay cohabiting ($375,000 compared to $139,000). The economic advantage of cohabiters who marry is especially pronounced among 50–64 year old cohabiting men. Compared to their same-age male counterparts who stay cohabiting, 50–64 year old cohabiting men who marry have incomes that are four times greater ($86,000 compared to $21,000), financial wealth that is three times greater ($85,000 compared to $30,000), and nonfinancial wealth that is 40% greater ($309,000 compared to $215,000).

Third, income provision is relatively uncommon among older cohabiters, although the highest concentration of income provision, regardless of gender, is among cohabiters who marry (Figures 7 and 8). The same is true for the prevalence of financial transfers. Among 50–64 year old cohabiting women who marry, for example, 10% engage in income provision and 40% in financial transfers; among those 65 and older, 12% engage in income provision, 46% in financial transfers. These percentages are more than double that of female cohabiters who separate or stay together (Figure 7). Indeed, the percentage of cohabiters engaging in any kind of exchange with family is about 40% greater among men and women who marry, regardless of age, compared to their counterparts who separate or stay together.

**Life Table Estimates**

Summary statistics in Table 5 suggest that the duration of later-life cohabitations and the timing of cohabitation transitions may differ by age and gender. To gain a better understanding of these patterns, Figures 9 and 10 illustrate life table estimates of survivor rates among later-life cohabitations. They show the percentage of cohabiting unions still
“surviving” or remaining intact over time relative to the percentage of “exits” (cohabitations that transform into marriage or end in separation). The figures therefore illustrate the stability of cohabiting unions at older ages. Although the estimates depart substantially from those of cohabitation stability during young adulthood, we must interpret the trends cautiously. Short-term cohabitations are likely under represented in the survivor curves due to data limitations (see Chapter 3), thereby biasing estimates upward.

Overall, survivor estimates are similar for cohabiting men and women but differ noticeably by age group. After two years, roughly half of cohabitations are still intact among 50–64 year old cohabiters and two thirds among cohabiters who are least 65. These estimates are higher than estimates of cohabitation stability during young adulthood where only one third are intact after two years (Bumpass and Lu 2000; Bumpass et al. 1989; Sanchez et al. 1998). After five years, about one quarter of cohabitations are intact among 50–64 year old cohabiters and slightly less than half among those 65 and older. In comparison, about 10% of cohabitations among young adults are still intact after five years (Bumpass et al. 1989; Lichter et al. 2006). Even among older cohabiters, the difference in survivor estimates is large between the younger and older age groups. Among cohabitations of the longest duration (5+ years), roughly twice as many cohabitations survive at every year thereafter among cohabiters 65 and older than among the 50–64 year olds.

Among the younger age group of cohabiters, survivor estimates do not differ by gender but small differences are apparent among the older group of cohabiters. At every
year since cohabitation, survivor estimates are higher among the oldest cohabiting women than among the oldest cohabiting men. For example, roughly 90% of cohabiting unions have survived after the first year among women who are at least 65 compared to 83% among their same-age male counterparts. These numbers fall to 77% and 68% for older women after two and three years, respectively, compared to 71% and 61% for older men. Substantively, these differences are not large but the overall curves have a weak, statistically significant difference from one another ($p < .10$).

Thus, the survivor estimates suggest that cohabiting unions appear longer lived and more stable among the oldest cohabiters (65+) than among their younger (50–64 year olds) counterparts. Moreover, the stability of later-life cohabiting unions appears to differ somewhat by gender in that a higher percentage of the oldest women’s cohabitations survive at each interval than the oldest men’s.

**Multivariate Analyses: Cohabitation Stability Among 50–64 Year Olds**

Table 6 presents results from discrete-time multinomial logistic regressions predicting the relative risk of marrying or separating compared to remaining in a cohabiting union. It shows results for 50–64 year olds.

The first noteworthy finding is the effect of time on cohabitation transitions. Among 50–64 year olds, regardless of gender, cohabitation duration has a negative effect on cohabitation stability. It increases the likelihood that cohabitations are transformed into marriage and that they dissolve and separate. For example, among cohabiting women the risks of marrying or separating increase by about one half (1.55 and 1.41,
respectively) for each additional year of cohabitation (Panel A). Among men, the risk is statistically smaller, about one third higher per additional year for each transition type (1.35 for marriage and 1.32 for separation) (Panel B). For both genders, the significant squared term suggests that the effect of cohabitation duration attenuates over time. Therefore the risk of ending a cohabitation, whether through marrying or separating, is increasing at a decreasing rate over time for men and women.

**Economic Resources: Conventional Measures.** In both panels of Table 6, Model 1 shows the effects of conventional measures of economic resources on later-life cohabitation transitions. Among women, education and income encourage cohabitation stability by decreasing the risks of separation. In other words, it appears as though women with more resources are more likely to remain in their cohabitations than to separate compared to women with lower education and income. The effects of education and income on the risk of marriage are contradictory. Although income appears to facilitate cohabitation stability by deterring marriage, income also increases the likelihood of marriage. Therefore, conventional measures of economic resources decrease the chances of separation but increase the chances of marriage thereby producing both stabilizing and transformative effects on cohabiting unions.

Among 50–64 year old cohabiting men, education and income increase the risk of marriage. For each unit increase in education and income, the risk of marriage is 1.06 and 1.02 times as great, respectively, as the risk of staying in a cohabiting union. These resources have a contradictory effect on the risk of separation. Increases in education appear to facilitate separation among 50–64 year old cohabiting men while increases in
income appear to deter separation. Similar to results for women, conventional measures of economic resources have contradictory effects on cohabitation stability.

**Economic Resources: Later-Life Measures.** Model 2 introduces later-life measures of economic resources. For cohabiting women, the effects of education and income become statistically nonsignificant. Wealth has a strong destabilizing effect on cohabitation: a single logged-unit increase in wealth is associated with a risk of marrying or separating that is 1.09 and 1.04 times as great, respectively, as the risk of remaining cohabiting. Note that education still retains some significance and still increases the risk of marriage. Compared to poorer and less educated women, wealthier and more educated women are disproportionately likely to transform their cohabitations into marriage or exit them by separating.

Wealth has a statistically similar effect for 50–64 year old men as it does for women in this age category: wealth increases the risks of marrying for cohabiting men but has a stabilizing effect on cohabitation by decreasing the chances of separation. In other words, wealthier cohabiting men are disproportionately likely to remain cohabiting but, if they do not, they are disproportionately likely to transform that cohabitation into a marriage. Poorer cohabiting men, in comparison, have a lower risk of marrying and a higher risk of separating.

Curiously, financial transfers and income provision have statistically similarly transformative effects on cohabitation for 50–64 year old men and women by increasing the chances of marrying. The risk of marrying versus remaining cohabiting is 1.70 times and 1.55 times as great among women and men, respectively, who made transfers than
among those who did not make transfers. The substantive effect income provision on the risk of marrying are similar to that of transfers. Namely, income provision significantly increases the risk of marrying versus staying in a cohabiting union. The effect size, however, is significantly greater for 50–64 year old cohabiting women than it is for their same-age male counterparts.

Regarding the risk of separation, financial transfers have a positive effect only among cohabiting men. They increase men’s risk of separation by about half compared to cohabiting men who did not make transfers to family members. Financial transfers and income provision are not associated with cohabiting women’s risk of separation in this age group.

Multivariate Analyses: Cohabitation Stability Among Persons 65 and Older

Table 7 presents results from discrete-time multinomial logistic regressions predicting the relative risk of marrying or separating compared to remaining in a cohabiting union. It shows results for cohabiters who are at least 65 years old.

The effect of time on cohabitation transitions is significantly different among this older group of cohabiters than among 50–64 year olds. The risk of transforming a cohabitation into marriage or ending one by separating declines substantially over time. The risk of marrying among this age group of women is about half (.43), and the risk of separating about four fifths (.79), the risk of an older woman who has cohabited for just one less year (Panel A). For cohabiting men who are at least 65, the effects of time on the risk of cohabitation transition are statistically smaller than those for women who are at
least 65. Thus, the longer that adults who are at least 65 remain cohabiting, the more likely they are to stay together relative to marrying or separating. As is the case for 50–64 year old cohabiters, the significant squared term suggests that the stabilizing effect of cohabitation duration attenuates somewhat over time.

Nevertheless, later-life cohabitations appear to garner considerable momentum for self-maintenance with each passing year that they remain intact. The results therefore suggest that cohabitation duration has a stabilizing influence on the cohabiting unions of those who are at least 65 years old. This finding mirrors that from previous studies showing that cohabitation duration decreases the chances that cohabiters either marry or separate (Brown 2000).

**Economic Resources: Conventional Measures.** Model 1 shows covariate estimates for conventional measures of economic resources. Among this older group of cohabiting women, many of the results for the conventional measures are statistically similar to results for their younger counterparts (Table 6). For example, educational attainment is positively associated with marrying among the oldest women just as it is among 50–64 year old cohabiting women. Similarly, income is negatively associated with separating, again just as it is among 50–64 year old women. Among the oldest cohabiting women, however, fewer of the conventional measures of economic resources attain significance. Notably, income no longer plays a significant role in the risk of marrying while education no longer shapes the risk of separating (unlike for the younger group of cohabiting women).
Among the oldest cohabiting men, the effects of conventional measures are statistically similar to those of their younger counterparts (Table 6). Education increases the risks of marrying or separating. For example, for each year of education the risks of marrying or separating are 1.09 and 1.05 times greater, respectively, than the risk of staying in a cohabiting union. Again, education and income have contradictory effects on the chances of separating: increases in education are associated with a greater risk of breaking up while increases in income are associated with a decreased risk of separating. Therefore, for older cohabiting men and women alike, conventional measures of economic resources have contradictory effects on cohabitation stability. In some instances, these resources appear to facilitate cohabitation stability by deterring separation; in other cases, they destabilize cohabiting unions by increasing the risk of separation.

**Economic Resources: Later-Life Measures.** Model 2 presents results using later-life measures of economic resources. For older cohabiting women (Panel A, Table 7), including later-life measures in the analyses reduces the effects of education and income to statistical nonsignificance. Interestingly, wealth appears to have a pronounced stabilizing effect on cohabiting unions for older women: it decreases the risks of both marriage and separation. For a one logged-unit increase in wealth, the risk of marrying among older cohabiting women is .95 while the risk of separating is .89. Recall that for 50–64 year old women, wealth has a significantly different (indeed opposite) effect: it destabilizes cohabitation by increasing the risk of separation and it has a transformative effect by facilitating marriage. Thus, wealth has a statistically different effect on later-life
cohabitation transitions among women 65 and older than it does for 50–64 year old cohabiting women.

Financial transfers have transformative and destabilizing effects on cohabitation among the oldest women by increasing the chances of marrying or breaking up. The risk of marrying is 2.38 times and the risk of separating 1.79 times as high among women who made transfers than among those who did not. The effects for income provision are more pronounced. For older women who engage in income provision, the risk of marrying is three times higher and the risk of separating two and a quarter times higher compared to women who did not engage in income provision (Panel A).

Among older men (Panel B), results are somewhat different. First, the addition of wealth and financial transfers does not completely eliminate the statistically significant effect of education, although it is substantially reduced (from 1.09 to 1.03). Both wealth and education are positively associated with marriage compared to remaining in a cohabiting union, and wealth is negatively associated with separation. Thus, wealth has stabilizing and transformative effects on older men’s cohabiting unions: wealth increases the likelihood of marrying while deterring separation, which statistically similar to results for 50–64 year old cohabiting men but statistically different from cohabiting women are 65+. The results are also consistent with past findings on the effect of economic resources on younger men’s cohabitation transitions. The poorest cohabiting men are selected out of cohabitation into singlehood while cohabiting men in the best economic standing are selected into marriage (Brown 2000; Oppenheimer 2003; Smock and Manning 1997).
Notably, financial transfers do not attain significance for the oldest male cohabiters (in contrast to their younger counterparts). Only income provision affects cohabitation transitions. Older cohabiting men who provided a family member with half of his income are twice as likely to separate as men who did not engage in income provision.

**Sensitivity Check: Cohabitation Stability and Wealth Type**

Wealth is a composite measure of financial and nonfinancial net worth, both of which represent different types of assets. In supplemental analyses, I disaggregate wealth into its two components and compare the effects of financial and nonfinancial wealth on later-life cohabitation transitions. Table 8 summarizes results from these analyses. Total wealth is provided as a reference and is taken from Model 2 (in Tables 6 and 7). Results for financial and nonfinancial wealth are from separate analyses with the full model.

For the younger group of cohabiters, 50–64 year olds, the results are not sensitive to wealth type for either cohabiting men or women. Among women, the disaggregated measures of wealth continue to have effects on cohabitation transitions that are similar to the effects of composite wealth. In other words, financial and nonfinancial wealth both have transformative effects on cohabiting unions in that they facilitate marriage and they have destabilizing effects in that they facilitate separation. For younger cohabiting men, the disaggregated financial and nonfinancial wealth measures continue to facilitate marriage while deterring separation, similar to the effects of the composite wealth measure.
It is only among the oldest cohabiters (65+) that wealth type matters—and only among women. For men in this age group, the effects of the disaggregated wealth measures on cohabitation transitions are similar to the effects of composite wealth. In other words, wealth type does not matter: both financial and nonfinancial assets facilitate marriage while deterring separation. For cohabiting women in this age group (65+), the risk of marriage is driven entirely by nonfinancial wealth. In this case, financial assets have little overall effect on cohabitation transitions. When housing wealth is removed from nonfinancial assets (not shown), the effect of nonfinancial wealth becomes nonsignificant. In sum, the sensitivity test suggests that real estate values drive the negative relationship between wealth and marriage for cohabiting women.

The sensitivity test provides further evidence that the same asset (housing wealth) has two completely different effects on cohabitation transitions at the oldest ages, depending on gender: a positive effect on marriage for the oldest cohabiting men, a negative effect for the oldest cohabiting women. Moreover, the risk of separation is not tied to wealth type. The negative effects of financial and nonfinancial wealth on the risk of separation are similar to the effects of composite wealth, regardless of gender. *The importance of housing wealth for cohabitation transitions is therefore peculiar to women’s process of marrying from cohabiting unions.*

**Summary of Findings**

Several important findings emerge from this chapter’s analyses on cohabitation transitions among older adults.
(1) The stability of later-life cohabitations varies markedly by age and somewhat by gender. Roughly half of the cohabitations of 50–64 year olds are intact after 2 years compared to two thirds of cohabiters who are 65 and older. At every duration, survivor estimates are higher among the oldest cohabiters than among their younger counterparts. These findings are consistent with Hypothesis 4. Survivor estimates are slightly higher at most durations among the oldest (65+) cohabiting women compared to the oldest (65+) cohabiting men, but not between genders among 50–64 year old cohabiters. These findings partially support Hypothesis 4.

(2) The role of time in cohabitation transitions differs by age. For 50–64 year olds, cohabitation duration typically increases the risks of marrying or separating for male and female cohabiters. Among those 65 and older, cohabitation duration has a strong stabilizing influence by decreasing the chances of transiting out of cohabitation, whether in marriage or separation. In other words, the longer that the oldest cohabiters remain together, the more likely they are to stay in those informal unions.

(3) The addition of later-life economic resources largely reduces to statistical nonsignificance the effects of education and income on cohabitation transitions. For 50–64 year olds, education still retains a positive effect on the chances of marrying albeit a greatly reduced one when wealth is introduced in the model. Among those 65 and older, education retains a significant effect only for men. These findings are partially consistent with Hypothesis 5.

(4) Wealth has similar effects on cohabitation transitions for older men regardless of age. Consistent with Hypothesis 6, wealth increases the chances that cohabiting men
marry while deterring their chances of separation. For women, the effect of wealth depends on age. Among 50–64 year old women, wealth has transformative and destabilizing effects on cohabitation by increasing the risks of marriage or separation. Among women 65 and older, wealth has the opposite effect, which is significantly different than the effect for their younger counterparts: it stabilizes cohabitation by deterring both marriage and separation. Only this latter finding for older women is consistent with Hypothesis 6.

(5) Partially consistent with Hypothesis 7, financial transfers and income provision have transformative effects on cohabitation by increasing the chances of marrying (which is inconsistent with the hypothesis) for the youngest cohabiters and for the oldest female cohabiters. For this latter group, financial transfers and income provision have destabilizing effects on cohabitation by increasing the chances of separation (consistent with the hypothesis). Moreover, financial exchanges have little effect on cohabitation transitions for the oldest male cohabiters (also consistent with Hypothesis 7).

(6) The relationship between wealth and the risk of marriage among the oldest cohabiting women (65+) is driven entirely by the net worth of their housing. Moreover, the effect of housing wealth differs by gender. Among the oldest female cohabiters, housing wealth discourages marriage, among men it facilitates marriage.
Chapter 6. Discussion and Conclusion

Implications of Findings and Directions for Future Research

Demographic changes are reshaping the population, age, and household structures of the United States. Not only are Americans growing older and living longer, but the number of older persons and their share of the population are rising. Via cohort replacement from aging baby boomers, the population of older adults has rising divorce and falling remarriage rates. While Americans are growing older and living longer, increasing numbers of older adults are spending time unmarried. As a result, many older adults are available to enter into new unions during later life. We should not think that marriage is the only option for them. Older adults too are participating in the diversity of family forms associated with young adulthood, including cohabitation (Allen et al. 2000; Cooney and Dunne 2001). Indeed, older adults comprise the fastest growing group of cohabitors in the United States (Chevan 1996; Fitch et al. 2005).

At a time when demographic changes make it opportune to understand the union formation patterns of older adults, we face a paucity of research on the topic. Most studies on union formation have a pronounced life course bias toward young adulthood. Numerous studies have explored the economic determinants of young adults’ union formation (Goldscheider and Waite 1986; Lichter et al. 1992; Mare and Winship 1991;
McLaughlin and Lichter 1997; Oppenheimer and Lew 1995; Oppenheimer, Kalmijn, and Lim 1997; Sassler and Schoen 1999; Sweeney 2002) and cohabitation stability during young adulthood (Bumpass and Lu 2000; Bumpass and Sweet 1989; Lichter, Qian, and Mellott 2006; Manning and Smock 1995; Sanchez et al. 1998; Wu 1995; Wu and Balakrishnan 1995; Wu and Pollard 2000). In contrast, only a handful of studies has examined marriage and cohabitation in later life. Most of these studies are qualitative or are based primarily on European samples (de Jong Gierveld 2002, 2004; de Jong Gierveld and Peeters 2003; Stevens 2002; van den Hooaard 2002) while work thus far in the United States has been cross-sectional (Brown et al. 2006; Chevan 1996; Hatch 1995; King and Scott 2005). Consequently, many questions remain unanswered about the prevalence, timing, and economic determinants of union formation among older Americans.

In response to the demographic timeliness and paucity of research, this study examines union formation among older Americans (aged 50+). Its two primary research aims are: (1) to explore the process of entering marital and cohabiting unions among single older adults; and (2) to explore the stability of later-life cohabitations. Drawing on Becker’s (1991) independence hypothesis and Oppenheimer’s (1988, 1994, 1997) theory of marriage timing, the study focuses on the economic determinants of union formation. It explores the role of conventional measures of resources (education and income) as well as the role of more salient measures for older adulthood (wealth, financial transfers, income provision). It is the first longitudinal study of later-life marriage and cohabitation in the United States and the first to explore cohabitation stability during older adulthood.
A number of implications, both empirical and theoretical, can be drawn from the study’s findings on union formation during older adulthood.

**Measuring Economic Resources in Later Life**

Most studies on young adults’ union formation use multiple measures to capture economic resources including education, employment, and income. Employment and income may reflect current economic standing while education better reflects economic potential (Oppenheimer 1994, 1997, 2003). It is common therefore for studies to use variations on these three measures.

For studying later-life union formation, however, these measures produce contradictory results that are challenging to interpret. Indeed, past studies on union formation among older adults have noted similar contradictory results and so have struggled to develop a consensus on the role of economic resources. For example, some studies find a negative relationship between education, income, and later-life cohabitation (Brown et al. 2006; Hatch 1995) and remarriage (Smith et al. 1991). In contrast, others find a positive relationship (Chevan 1996; de Jong Gierveld 2004).

One reason for contradictory and inconsistent findings may be because the studies use measures of economic resources that are not pertinent to the life course stage of older adulthood. Importantly, none of the past studies on this topic has used measures of wealth or financial transfers. Results here show that when wealth is included in the models, most statistically significant associations disappear between union formation and education and income. These findings provide good empirical evidence that wealth is a better
predictor of later-life union formation than either education or income. They also suggest that wealth may be a better barometer for measuring economic resources during older adulthood. As illustrated by summary statistics presented in Tables 1 and 5, older adults can be described as income poor but asset rich. If we relied only on measures of older adults’ income, we would have an incomplete and misleading portrait of their economic standing that misses a substantial portion of their resources. Consequently, future research on union formation during older adulthood, and on topics involving older adults more broadly, may benefit from using economic measures designed to capture wealth rather than more conventional measures of resources.

Conventional measures are not obsolete, however. It is telling that they retain some significant relationship (albeit with diminished effect size) when wealth is included in the models. Generally, this is true for 50–64 year olds and not for persons 65 and older. This finding is not altogether surprising. A portion of the younger age group is preretirement and thus more likely to be employed (see footnotes 10 and 11, pp. 55 and 66, respectively). They are also more educated and have higher incomes (as attested in the descriptive statistics, Tables 1 and 5). Thus, education and income are still salient measures of economic resources for younger, preretirement-aged adults whereas by the traditional retirement age wealth is a more appropriate barometer.

Challenging the Portrait of Older Adulthood from Past Studies

That wealth positively associates with union formation challenges two portraits of older adulthood that have emerged from past research. First, some studies have suggested
that single older women who are financially secure may avoid marriage because it threatens their independence and the resources they wish to protect (Davidson 2002; de Jong Gierveld 2002; de Jong Gierveld and Peeters 2003). Instead, resources may subsidize singlehood (Smith et al. 1991) or encourage nontraditional unions such as cohabitation, which has fewer economic entanglements than marriage (Chevan 1996; Hatch 1995; de Jong Gierveld 2002; Karlsson and Borell 2002). These data cannot assess older women’s motivations (a limitation which I discuss in more detail below). With the exception of a handful of studies, we generally know little of older adults’ attitudes about union formation (Bulcroft and Bulcroft 1991; Bulcroft et al. 1989; Talbott 1998). Thus, single older women may indeed feel reluctant to marry and prefer to remain single.

Nonetheless, results demonstrate that single older women who are wealthy are not eschewing marriage—quite the contrary. Even small increases in wealth greatly raise their chances of marrying. In other words, past research portrays in one light the attitudes of single older women while the current study reveals that their behaviors are quite different. If behaviors reflect latent values, then single older women who are wealthy may actually prefer marriage over nontraditional alternatives. Whether they do ultimately remains outside the scope of this study. The more conservative conclusion is that wealth has a strong, positive association (not negative) with partnering among single older women. It does not appear therefore that single older women who are wealthy are shunning marriage.

Second, past studies suggest that poverty is a backdrop to later-life cohabitation because older cohabiters tend to be poorly educated and have low incomes compared to
their married and remarried counterparts (Brown et al. 2006; Chevan 1996). Importantly, the incomes and financial wealth of single older adults who cohabit are statistically indistinguishable from those who marry (Figures 1 and 2). Men and women who marry, regardless of age group, do have more total wealth than their counterparts who cohabit, however this difference is due entirely to housing wealth. Single older adults who marry possess on average, across genders and age groups, real estate that is worth about $82,500 more than older adults who cohabit. Nevertheless, it is difficult to conclude that “poverty” characterizes later-life cohabitation when the average net worth of older female cohabiters totals $287,000 (50–64) and $372,000 (65+), while that of male cohabiters totals $255,000 (50–64) and $378,000 (65+).

Moreover, wealth does not shape the likelihood that single older adults marry versus cohabit. In other words, wealthier older adults who are single are just as likely to marry as they are to cohabit. This is a noteworthy finding and an example of when a nonsignificant result is just as intriguing as a significant one. The finding is distinctive because it stands at odds with what we know about cohabitation during young adulthood. Poorer young adults tend to cohabit while their more advantaged counterparts marry (Clarkberg 1999; Oppenheimer 2003; Sasser and McNally 2003; Smock et al. 2005). Indeed, this finding has emerged repeatedly in the literature and has become a hallmark characteristic of union formation during young adulthood. At older ages, however, the association between economic disadvantage and cohabitation does not appear to exist. If single older adults partner, wealth does not play a discernable role in whether they marry.
or cohabit. Because of these findings, the current study challenges the notion that later-life cohabitation is characterized by economic disadvantage relative to later-life marriage.

**Cohabitation Stability and Cohabiting Unions as Alternatives to Marriage**

An intriguing finding to emerge from the study is that cohabitation among older adults appears to be relatively stable, at least compared to estimates from studies on cohabiting unions during young adulthood. After two years, roughly 7 in 10 cohabitations among persons 65 and older, and 5 in 10 among 50–64 year olds, are still intact. In comparison, just 3 in 10 cohabitations are intact among young adults after the same period (Bumpass and Sweet 1989). After five years, only 1 in 10 cohabitations has survived among young adults (Bumpass et al. 1989; Lichter et al. 2006) whereas roughly 1 in 4 has survived among 50–64 year olds and 1 in 2 among those 65 and older. It would appear then that cohabitations in later life are relatively more stable than cohabitations during young adulthood.

The estimates of later-life cohabitation stability have implications for how we interpret the findings from past research on young adult cohabitation. For example, among young adults cohabiting women are more likely to marry while cohabiting men are more likely to separate (Manning and Smock 1995; Wu and Balakrishnan 1995). During older adulthood, however, cohabiting women are more likely to remain in their unions whereas cohabiting men are more likely to marry, at least among the oldest cohabiters in the sample (65+). Findings from previous studies have suggested that cohabitation is more stable at older ages (Brown 2000; King and Scott 2005). These
findings were based on samples of young and middle-aged adults (using the National Survey of Families and Households, in the case of Brown 2000) and a small sample of older cohabiters ($n = 76$) (King and Scott 2005). In comparison, the current study can provide better evidence that later-life cohabitations appear to be durable because of its longitudinal data and larger samples of older adults.

My findings have implications for how scholars conceptualize the meaning and function of cohabitation during older adulthood. It is possible, though not definitive from these findings, that cohabitation is more a marital alternative among the oldest cohabiting women than a stepping stone to marriage. We can find support for this idea in three pieces of evidence. First, cohabiting unions among women 65 and older are more durable than unions among 50–64 year old cohabiting women. Second, affluence is a strong deterrent against transforming cohabiting unions into marriage or ending them with separation among cohabiting women who are at least 65. In other words, affluence helps sustain the cohabiting unions of older women. Wealth does not have the same positive relationship with cohabitation stability among cohabiting men or among 50–64 year old cohabiting women. For these two groups, affluence has transformative effects on cohabitation by increasing the risk of marriage.

Third, consider the effect of time on women’s cohabitation transitions. Among 50–64 year old women, cohabitation duration has a destabilizing effect by increasing the likelihood of marrying or separating. Cohabiting unions for this younger group of women are relatively transitory and appear to be more of an intermediary step to marriage. Among the oldest women (65+), cohabitation duration decreases the chances of marrying
or separating. In other words, time has a stabilizing effect on cohabiting unions thereby suggesting that they may function like a marital alternative for this age group of women. The opposite effect of time for these two groups of women is noteworthy considering the relatively small age gap that separates them. Such a striking change in the effect of time suggests that the interval between ages 50 and 65 may be a critical period during which the function and meaning of “later-life” cohabitation change.

It is possible, for example, that older cohabiting women are satisfied with their informal unions and have little desire to turn them into marriages. The oldest cohabiting women may not feel much urgency to marry perhaps because marriage is less salient to their life course stage. Indeed, single older women do not feel much need to marry and often view marriage as something that they have “already done” when they were younger (Bulcroft and Bulcroft 1991; Bulcroft and O’Conner 1986; Talbott 1998). In contrast, younger women may feel there is “enough time” yet to marry before they reach older ages. Based on findings presented here, King and Scott’s (2005) conclusions about the function of later-life cohabitation could be refined. It is not older adults in general for whom cohabitation is a marital alternative but the oldest cohabiting women especially.

Another possibility is that forgoing marriage for some older cohabiting women protects their receipt of Social Security spousal or survivor benefits. Remarriage prior to age 60 would disqualify the widowed from receiving survivor benefits while remarriage at any age would disqualify the divorced from receiving spousal benefits. Although not controlled in these analyses, it is unlikely that concern over Social Security receipt is a primary factor explaining older cohabiting women’s union transitions: the durability of
cohabiting relationships is more pronounced among the *oldest* women whose potential remarriage would not affect their eligibility for receipt. Nevertheless, concerns over Social Security eligibility may be a motivating factor behind union formation patterns for older adults, notably for women who are more likely than men to rely on their partners’ earnings record for Social Security benefits. Indeed, some single women in their 50s may purposefully enter cohabiting unions rather than marriages or delay a potential marriage to safeguard their benefits.

Ultimately, such conclusions are beyond the scope of this study which does not address older adults’ motivations or attitudes about union formation (I discuss this point further in the study limitations). Moreover, the evidence is suggestive of cohabitation as a marital alternative among the oldest women, but it is not definitive. As noted in Chapter 3, the sample is selective of individuals who already have more durable cohabitations. The data omit cohabiting unions that occur entirely between waves, unions that are likely to be of shorter duration. Given the data limitations and sample bias, we should be careful to avoid overly assertive conclusions about the stability and long-term function of later-life cohabiting unions.

**Housing Wealth, Financial Transfers, and Their Gendered Role in Union Formation**

Another intriguing finding to emerge from the study is the distinctively gendered role that wealth plays in union formation at older ages, particularly housing wealth. For single older women, both financial and nonfinancial wealth positively shape their
likelihood of entering unions. In contrast for single older men, only housing wealth matters. The greater the net worth of their housing, the higher their likelihood of marrying or cohabiting. Thus, housing wealth is the most important economic factor (measured) for predicting single older men’s likelihood of union formation.

Housing may feature prominently in later-life union formation because it represents security, stability, and independence. As previous researchers have conceptualized, housing may be a vehicle for older adults to avoid institutionalized living arrangements, dependency on family, and poverty more broadly (Chevan 1996; Hatch 1995). Housing also represents a store of family memories and for the widowed especially a connection to deceased spouses (Davidson 2002). Although this study does not address marriage markets, the results would seem to suggest that housing is an attractive trait among single older men perhaps because it represents a relatively secure financial future, especially if that housing is debt free.

Curiously, housing wealth similarly shapes the likelihood that single older men marry or cohabit. In other words, housing wealth plays an analogous role in the formation of both unions. If housing wealth is an attractive trait among single older men, then the results would suggest that it is as attractive in potential husbands as it is in potential cohabiting partners. This conclusion would be somewhat surprising considering that marriage offers more legal entitlements and economic ties than cohabitation. Presumably marrying a male partner with substantial housing wealth would offer more secure access to those resources than entering a cohabiting union with him. But because housing similarly affects men’s entry into marriage and cohabitation, it would appear that the
important role of housing is independent of the relatively greater commitment of marital unions.

Housing wealth also has a gendered effect on cohabitation stability. Here housing wealth decreases the likelihood that cohabiting unions transition to marriage but only among the oldest cohabiting women (who are at least 65). This finding amends past research. For example, Wu and Pollard (2000) found that income increases the likelihood that cohabiters separate. Among older cohabiters, wealth facilitates separation only among 50–64 year olds. Whereas Sassler and McNally (2003) found that resources deter both separation and marriage for cohabiting men, the same finding holds only for cohabiting women who are at least 65 years old. My findings also highlight that housing wealth is more salient among the oldest cohabiters than it is among 50–64 year old cohabiters (according to sensitivity tests, Table 8). Therefore, housing wealth and real estate are especially important to the union formation process among the oldest cohabiting women.

It is equally revealing that housing wealth has the opposite effect on cohabitation stability for older men (negative effect) as it does for older women (positive effect). As noted, it is possible that valuable housing is an attractive trait among potential husbands and thus hastens the transformation of men’s cohabiting unions into marriage. That wealth has the opposite effect for cohabiting women than it does for cohabiting men implies that cohabitation may be more of an alternative to marriage for women than a precursor. But this finding also implies that the meaning or function of housing wealth
for cohabitation stability depends on gender. In short, housing wealth helps the oldest cohabiting women avoid both marriage and singlehood.

A segment of older women may be seeking cohabitation as an alternative to marriage, consistent with the idea that wealth may allow them to avoid marriage and its accompanying care giving burdens and asymmetrical divisions of household labor (Davidson 2002; de Jong Gierveld 2002; Karlsson and Borell 2002; van den Hoonaard 2002). Moreover, older cohabiting women’s housing wealth may be attractive to their male partners because it discourages dissolution. Because this study does not address marriage markets, however, this conclusion is tenuous and ultimately beyond the scope of the findings.

Financial transfers have a gendered influence on union formation. Among single older women, transfers discourage marriage relative to singlehood while encouraging cohabitation relative to marriage. Perhaps transfer recipients (family members) disapprove of their older kin’s partnering and worry that it could result in a loss of control over assets (Chevan 1996; de Jong Gierveld and Peeters 2003; Hatch 1995). When transfers are active, family members may discourage older women from marriage but not cohabitation. As noted, cohabitation is often conceptualized to be a less committed union with fewer partner obligations and legal and economic ties (Cherlin 2004; de Jong Gierveld 2002; Karlsson and Borell 2002; Nock 1995). In this way, cohabitation may be a “safer” alternative to marriage for offspring to protect parental assets.

On the other hand, it is plausible that transfers increase the costs of marriage by limiting the search process and decreasing single women’s attractiveness to a potential
partner (Becker 1991; Oppenheimer 1988). It is also possible that single older women are uninterested in marriage when their family is in need of financial assistance. These explanations remain competing hypotheses that the current analysis cannot address. Nevertheless, transfers exert a notable influence mainly on older women’s union formation, suggesting that their effects are highly dependent on gender.

Theoretical Implications

The two final implications to consider from this study are theoretical. First, both Becker’s (1991) independence hypothesis and Oppenheimer’s (1988, 1994, 1997) theory of marriage timing are salient for studying later-life union formation despite their original conceptual focus on young adulthood. For older single men, wealth facilitates entry into marriage and cohabitation. For older cohabiting men, wealth deters separation while encouraging marriage. These findings are consistent with Becker and Oppenheimer’s theories of union formation.

Importantly, these findings illustrate how the effect of economic resources on union formation is similar for older and younger men. A theoretically insightful finding, it shows that economic resources are critical to men’s union formation regardless of age. Even for men who are largely retired and out of the labor force, their economic standing still plays a central role in their likelihood of entering new unions in later life. It appears as though throughout men’s life course their chances of having any kind of partner (whether marital or cohabiting) is dependent on their economic resources. The implications of this finding are noteworthy when considering the advantages in health.
and well-being that are associated with intimate relationships (Mastekaasa 1994; Rook 1997; Ross 1995; Waite 1995; Walker et al. 2001).

The theories cannot be applied wholesale to the setting of older adulthood, however. The study’s empirical findings offer evidence that the theories must be reformulated (at least somewhat) to study union formation in the context of later life. For example, Oppenheimer focused on the importance of economic potential for union formation because young adults, men in particular, have not had enough time to develop mature career trajectories. In the same vein that Oppenheimer retooled economic resources to fit the life course stage of young adults, this study has done the same for the setting of older adulthood. My findings provide good evidence that extant resources such as wealth are more important for predicting later-life union formation than education or income.

This conclusion is not altogether surprising. Completing education and starting career trajectories are not typical experiences for older adults. Wealth, on the other hand, better encapsulates older adults’ economic standing because it represents a cumulative stock of assets from decades of employment and income. These findings further emphasize the importance of measuring economic resources sensitively to the life course stage in which union formation occurs.

Second, the most intriguing theoretical implication to emerge from this study is that the findings support both Becker and Oppenheimer. It is surprising because their theories are oppositional and a long line of social science research finds evidence in
support of either one theory or the other. In this study, each of the research aims provides support for one of the theories.

That wealth facilitates any kind of partnering among single older adults—regardless of gender—supports Oppenheimer’s theory while rejecting the independence hypothesis. In other words, men and women’s economic resources are positively associated with marrying. On the other hand, that wealth facilitates marriage for cohabiting men while discouraging marriage for cohabiting women supports the independence hypothesis. Cohabiting women’s economic resources deter marriage while increasing the likelihood of marital alternatives.

In applying these theories to older adulthood, it would appear that Oppenheimer’s theory is applicable to predicting entry into unions from singlehood while Becker’s is applicable to predicting exits from cohabitation into singlehood or marriage. Although neither theory was originally developed for older adulthood, Oppenheimer’s may be more applicable than Becker’s: the former describes union formation among the broader population of single older adults whereas the latter is germane to a more select group of older female cohabiters. A theoretical implication is that the independence hypothesis may be cohort specific. It describes the union formation patterns of a generation of women for which male breadwinning and female care giving roles were more normative and traditional. If the hypothesis were cohort specific, then my results for the oldest cohabiting women may be “fleeting”: they will not hold as aging baby boomers—who grew up when traditional marital roles were becoming less normative and cohabitation more common—replace the population of older adults. Due to data limitations, it is not
possible to test this hypothesis but it will be as the HRS releases future waves that will include additional cohorts of aging baby boomers (see Chapter 3).

We must be careful when interpreting results from the study because both theories receive support depending on the population in question. If cohabitation were a marital alternative for all older women, then wealth would increase the risks of cohabiting versus marrying among single women, which it does not. Instead, wealth increases the chances of marital alternatives only among older women who are already cohabiting. Thus, the independence hypothesis is not applicable to some aspects of later-life union formation. Similarly, neither is Oppenheimer’s theory applicable to all of the union formation process at older ages because it does not accurately predict cohabiting women’s exits from cohabitation.

It is difficult to draw conclusions about this seemingly contradictory result. It is possible that cohabitation becomes or develops into a marital alternative for some women once they enter a cohabiting union. In other words, the meaning and function of cohabitation transform when women transition out of singlehood and begin cohabiting. Such an interpretation is highly tenuous though because the study uses two different analytic samples for each research aim and thus are not comparable to one another. What is clear from these findings is that each theory is applicable to one part of later-life union formation: Oppenheimer for entry into unions from singlehood, Becker for exits from cohabitation.
Study Limitations and Directions for Future Research

Alongside the study’s findings, it is important to consider limitations. Data constraints introduce potential problems with truncation, censoring, and selection. The study examines a narrow window of older adults’ lives (1998 to 2006) and captures relatively few incidences of union formation. Indeed, only 1 in 10 older adults partners during the period of observation. Such a narrow window is problematic because union formation at older ages is a protracted process. The data therefore are right censored because they do not capture many older adults who may (eventually) partner but are not observed doing so by the last available wave of data (2006).

Undoubtedly, older adults who remain single are a heterogeneous group, just as those who partner are selective (indeed, they are selective by virtue of the rarity of partnering). We should be careful to frame results accordingly, which are generalizable to a select group of older adults that partners during this period of observation. Further, the time between 1998 and 2006 may be associated with unique period influences that are beyond the scope of this study to capture. One could imagine that economic changes in the U.S. housing market (and the economy more broadly) at the close of the current decade could affect the relationship between wealth and union formation. Future research would benefit from longitudinal data that cover a longer period of observation.

Because the data are censored, the ultimate “fate” of many union transitions is unknown. For example, Research Sample 2 contains numerous cohabitations that are still intact when last observed. These cases are right-censored and so it is unknown whether and when these cohabitations transition into marriage or dissolve. As noted in Chapter 3,
the data do not capture cohabitations that occur entirely between waves. Such censoring leads to sample selection in which Research Sample 2 disproportionately captures more durable cohabiting unions while under representing short-term cohabitations. Life table estimates in Chapter 5 are therefore representative of cohabiting unions that may be more stable than those in the “true” population of cohabiting older adults.

Censoring due to sample attrition from mortality is also problematic. Deceased respondents are not “observed” exiting the analytic samples and thus some cases are censored because of a respondent’s death. It is not possible with these analyses to assess how much longer these persons would have cohabited or whether they would have married. Without this kind of information, our knowledge of union formation at older ages is incomplete because we are discounting a highly salient factor of older adulthood (mortality).

In addition to right censoring, the data are left truncated which further introduces problems with sample selection. As noted, Research Sample 1 over represents individuals with low-risk of partnering (especially at early durations) because it excludes older adults who were married or cohabiting before the start of observation. Hence the low incidence of partnering is not altogether surprising given the sample’s selectivity. The modeling strategy alleviates some concerns over potential bias (Guo 1993) as do the supplemental analyses in which the samples are restricted by time single (see footnote 4, p. 42).

Nevertheless, the potential for bias cannot be discounted and future research should attempt to minimize left truncation by using longitudinal data that cover a longer period. Further, we should be cautious when interpreting results. The findings are
generalizable to a selective sample of low-risk individuals who are single for a longer time before experiencing partnering than the sample of excluded individuals. Similarly, because of sample restrictions the results do \textit{not} address the processes and experiences of union formation for two groups: high-risk older adults who partner quickly following marital dissolution, and older cohabiters who transition quickly out of their cohabiting unions.

The study focuses on heterosexual, residential unions. Due to data limitations, it is not possible to identify same-sex couples and thus results cannot speak to the partnering experiences of older gays and lesbians. Examining only residential unions restricts the study to marriage and cohabitation. But other relationship forms are available to older adults including living-apart-together relationships. These relationships are committed, romantic unions but partners maintain separate households and live together only intermittently.

Some work has begun exploring living-apart-together unions among older adults, mostly in northern and western Europe (de Jong Gierveld 2004; Levin 2004; Stevens 2002). Estimates from the United States using the General Social Survey (GSS) suggest that about 6\% of single adults are in living-apart-together relationships, representing about one third of all persons who are not married or cohabiting (Strohm et al. 2009). Because Strohm et al.’s sample ranges in age from 23–70, it is unknown how prevalent these relationships are at older ages. Nevertheless, it is reasonable to conjecture that they are not a trivial portion.
Older adults may be interested in living-apart-together relationships for a variety of reasons. They are unwilling to give up their homes completely because they provide economic security and are associated with a lifetime of family memories. The latter motivation is important for widowed persons who feel a deep connection and loyalty to their former spouse and are reluctant to leave the home in which they lived together (Davidson 2002). Moreover, some single older women feel that living-apart-together relationships allow them to maintain independence, both personal and financial, by staying in their own homes. More so than cohabitation, they feel that living-apart-together relationships help them avoid the gendered household labor that typically accompanies residential unions (Davidson 2002; Lopata 1996; Pyke 1994; Stevens 2002). Thus, there is good reason to expect that some older Americans may be engaging in these relationships.

Unfortunately, living-apart-together relationships are unidentifiable with HRS data. Not only does the study miss a potentially important form of partnering among older adults, but a portion of the analytic sample could be miscoded. Because partnering is based on residential status, the outcome variable captures marriages and cohabitations. Some respondents could be miscoded as “single” even though they are in a living-apart-together relationship. As noted, the portion of older adults “remaining single” in this study is a heterogeneous group and its potential inclusion of living-apart-together relationships represents one source of that heterogeneity. Similarly, cohabiters who “break up” may actually have transformed their relationship into a living-apart-together one in which they are still together but no longer living residentially. By ignoring these
types of unions, the scope of the study changes: it does not address union formation experiences broadly but the formation of *residential* unions specifically.

As a guiding assumption, the study has relied on an underlying rational choice model of Becker and Oppenheimer’s theories: that individuals weigh the perceived costs and gains of forming unions within an economic framework. Consequently, this assumption frames later-life union formation as a “pragmatic” process that discounts the importance of other factors. For example, older adults’ desire for companionship and intimacy plays an important role in union formation. Poor social support networks and loneliness, for example, increase older men’s interest in dating and marriage (Carr 2004). Although the study controls network contact, it remains a rudimentary measure of social support.

Attitudes and motivations also shape cohabitation stability (Brown 2000, 2003; Brown and Booth 1996; Waller and McLanahan 2005). Cohabitors with low expectations to marry have low odds of marrying (Brown 2000) while cohabitors who are unhappy with their relationships are similarly unlikely to marry (Brown 2000, 2003; Brown and Booth 1996). Although older cohabitors have fewer plans to marry than younger cohabitors (King and Scott 2005), we cannot discount the potentially important role of relationship quality and marital expectations. Moreover, single older women express little interest in marriage and in dating more broadly (Bulcroft and Bulcroft 1989; Talbott 1998). Much of the sample that remains single therefore may be composed of individuals who have little interest in partnering. Older adults (women especially) who do marry or cohabit are likely selective on their attitudes about union formation. The HRS does not
collect data on relationship quality or on preferences and expectations about partnering. It is therefore important to stress that the study focuses on the economic determinants of union formation and that other pertinent factors, such as relationship preferences and quality, remain unmeasured.

Couple-level data would benefit the study. For example, the study is able to identify the important role that housing wealth plays in later-life union formation: it facilitates partnering for single older men and remaining in cohabitation among older cohabiting women. It does not identify why housing wealth matters, though. How do older adults evaluate a potential partner’s economic resources?

It is possible that housing wealth matters for union formation because it is more visible and thus its value is easier to assess than other assets (e.g., pensions, bank accounts). Valuable real estate (or properties that are debt free) may constitute an attractive trait among potential male partners thereby facilitating union formation. Perhaps older men with particularly valuable real estate holdings enter relationships with poorer but younger women. In other words, they exchange wealth and age in marriage markets. Or, older men who are in poor health may exchange wealth for care giving arrangements from a female partner. An older cohabiting woman may be unwilling to marry if her male partner also owns valuable housing because marriage might then entail selling and leaving her home.

All of these questions are best addressed with couple-level data, which would allow future research to explore marriage market exchanges at older ages. Understanding these exchanges is important for a couple of reasons. They can offer insight into why
economic resources matter for union formation and whether wealthier older men are partnering with wealthier older women. Older men also have more choices in marriage markets than older women due to marriage market constraints from sex-ratio imbalances. Yet the current analyses do not account for partner availability which past research has shown to be important for marriage patterns among young adults, notably economically disadvantaged groups (Lichter et al. 1992). Exploring marriage markets would be beneficial for more fully understanding the process of later-life union formation.

With the current analyses, it is unclear why financial transfers and income provision destabilize older adults’ cohabiting unions. It is reasonable to suppose that transfers strain cohabiting relationships, consistent with the idea that they are costs in the union formation process (Becker 1991; Oppenheimer 1988). This reasoning works best for explaining why cohabitations break up. It does not adequately explain why transfers also facilitate entry into marriage for older cohabiters. If transfers strain the relationship, it seems unlikely that such cohabitations would end in marriage. Another possibility is that the “effect” of transfers is spurious. Cohabiters who marry are typically younger and may disproportionately make more transfers because they have younger family members who rely on them for support (i.e., tuition payments, transfers for helping offspring purchase a first home). The “effect” of transfers may be an artifact of this association.

Conversely, the effect of transfers on cohabitation stability may represent a rational strategy among older adults. Transfers typically decline in frequency and amount after marriage (Pezzin and Schone 1999). Older cohabiters may marry as a way of severing such ties if they no longer want to make financial transfers to family members.
Within a given period, individuals are legally allowed to transfer a set amount of tax-free money to family members. Transfers may then represent a rational strategy among older adults for “saving down” assets and avoiding future estate taxes. If older adults who engage in this strategy are disproportionately wealthy and wealthier older adults have higher risks of marriage, then the “effect” of transfers on later-life marriage may be an artifact of this relationship. Assessing these motivations is outside the scope of this study because the HRS does not collect such information about financial transfers.

Future research should explore this avenue and should examine other kinds of transfers, for example exchanges of instrumental help such as care giving and housework. Instrumental exchanges may play an important role in union formation if older adults spend time caring for grandchildren or if they rely on their offspring for care giving. Similarly, the study examines only one kind of wealth: net worth. It does not examine debt which may factor into the process of union formation, especially in later life as older adults switch from saving and accumulating assets to spending them down.

**Conclusions**

As Americans are growing older, living longer, and spending more time in later life unmarried, it is timely to study union formation during older adulthood. This research contributes significantly to the small body of literature on later-life marriage and cohabitation. It is the first longitudinal study in the United States to explore the timing, prevalence, and economic determinants of marriage and cohabitation among older adults.
Further, its focus on the economic determinants of union formation extends a long line of social science inquiry that previously was limited to young adulthood.

By examining union formation among older adults, the study highlights how some patterns of marriage and cohabitation in later life are similar to those during young adulthood. For example, economic resources have a strong, positive relationship with union formation among single adults. In other ways, the study highlights how later-life patterns of marriage and cohabitation differ from those in early adulthood. If single older adults enter unions, economic resources play little role in whether they marry or cohabit. But during young adulthood the economically advantaged disproportionately marry instead of cohabit. Later-life cohabiting unions also show remarkable durability and appear to be an alternative to marriage, specifically among some of the oldest female cohabiters.

These contributions to the literature on union formation are not only relevant considering the demographic changes and paucity of literature, they are relevant because it is important to understand union formation in its own right. Marriage and cohabitation are hallmark life course experiences. They organize individuals’ social lives, circles of friends and family, and networks of social support and care giving. Some evidence suggests that marriage may confer more benefits upon spouses than cohabitation does upon partners. Remarriage in later life is associated with better individual physical and mental health than cohabitation (Brown et al. 2005) and older cohabiters may be less likely to receive care giving from their partner than older married persons (Noel-Miller 2010). It is therefore important to study marriage and cohabitation among older adults.
because these unions are associated with the broader social experiences of older adulthood.

The study only broaches the topic of later-life union formation by examining partnering among heterosexual older Americans and the economic determinants of residential union formation. Numerous avenues remain for further study: for example, examining the role of expectations and attitudes, exchanges in later-life marriage markets, nonfinancial exchanges such as instrumental support and care giving, and debt on union formation patterns. As the number of older Americans and their experiences with nontraditional family forms continue to rise, so will the importance of exploring these questions and understanding the process of union formation in later life. The current study represents a substantive contribution to that effort and to expanding our knowledge about the experiences and lives of older Americans.
References


Appendix A

Tables
<table>
<thead>
<tr>
<th>Repartnering</th>
<th>Whole Sample</th>
<th>Women (50-64)</th>
<th>Women (65+)</th>
<th>Men (50-64)</th>
<th>Men (65+)</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
</tr>
<tr>
<td>Stay single</td>
<td>.90 (.84)</td>
<td>.84 † (.72)</td>
<td>.96 † (.82)</td>
<td>.62 † (.72)</td>
<td>.86 (.80)</td>
</tr>
<tr>
<td>Marry</td>
<td>.06 (.10)</td>
<td>.10 † (.08)</td>
<td>.02 † (.08)</td>
<td>.22 † (.14)</td>
<td>.08 (.06)</td>
</tr>
<tr>
<td>Cohabit</td>
<td>.04 (.07)</td>
<td>.07 † (.06)</td>
<td>.02 † (.06)</td>
<td>.16 † (.10)</td>
<td>.06 (.06)</td>
</tr>
</tbody>
</table>

| Conventional Resources      |              |               |             |             |           |
|                              |              |               |             |             |           |
| Education (years)            | 11.46 (3.53) | 12.30 * (3.08) | 11.15 (3.45) | 12.33 * (3.25) | 11.12 (3.92) |
| Personal income ($)          | 7,637.95 (22,929.57) | 16,468.84 * (23,872) | 1,738.19 (7,746) | 22,797.02 * (37,171) | 3,562.87 (18,872) |

| Later-Life Resources         |              |               |             |             |           |
|                              |              |               |             |             |           |
| Total wealth ($)             | 224,035.20 (850,037.20) | 187,295.70 * (499,241.90) | 208,950.60 (780,875.90) | 227,315.90 * (630,644.00) | 306,877.80 (812,931.00) |
| Financial wealth ($)         | 77,570.69 (475,586.10) | 45,792.39 * (237,387.90) | 76,282.87 (290,638.00) | 53,428.00 * (250,297.20) | 122,597.50 (811,495.30) |
| Nonfinancial wealth ($)      | 150,649.30 (603,884.40) | 141,570.40 * (387,987.20) | 139,787.10 (696,188.40) | 173,704.00 (532,723.50) | 188,185.30 (528,706.50) |
| Made financial transfer      | .27 .36 * .22 .35 * .24 |               |             |             |           |
| Income provision             | .06 .10 * .05 .08 * .04 |               |             |             |           |

| Controls                     |              |               |             |             |           |
|                              |              |               |             |             |           |
| Age (years)                  | 70.74 (11.74) | 57.67 * (5.14) | 77.65 * (8.16) | 57.94 * (4.73) | 76.60 (8.04) |
| Time single (years)          | 15.46 (11.73) | 14.47 * (10.18) | 17.03 * (12.53) | 13.18 * (9.71) | 12.61 (10.51) |
| Female                       | .72 .28      |               |             |             |           |
| Never married                | .09 .10 * .06 .18 * .12 |               |             |             |           |
| Divorced                     | .31 .50 * .19 † .66 * .34 |               |             |             |           |
| Widowed                      | .60 .40 * .75 .16 * .54 |               |             |             |           |
| White                        | .68 .60 * .71 † .67 * .70 |               |             |             |           |
| Nonwhite                     | .32 .40 * .29 † .33 * .30 |               |             |             |           |
| Good health                  | .33 .30 .30 .40 * .30 |               |             |             |           |
| Fair health                  | .54 .50 .56 † .48 * .57 |               |             |             |           |
| Poor health                  | .13 .11 * .14 † .12 * .13 |               |             |             |           |
| Residential offspring        | .25 .31 * .24 † .20 .20 |               |             |             |           |
| No residential offspring     | .75 .69 * .76 † .80 .80 |               |             |             |           |
| High network contact         | .23 .19 * .23 † .20 * .26 |               |             |             |           |
| Low network contact          | .77 .81 * .77 † .80 * .74 |               |             |             |           |
| N                            | 10,451 1,762 | 5,733 1,724 | 777 1,719 | 2,179 |

| Reference category in the multivariate analyses in Chapter 4. |

* Persons in the younger age category significantly differ from their same-gender peers in the older age category (at least p < .05) |
† Women significantly differ from their same-age male counterparts (at least p < .05) |

Table 1. Summary Statistics of Single Older Adults by Age and Gender (N = 10,451) (1998-2006 HRS)
### Table 2. Discrete-Time Multinomial Logistic Regressions of Partnering Among Single Individuals Aged 50-64 (1998-2006 HRS)

<table>
<thead>
<tr>
<th></th>
<th>Marrying vs. Staying Single</th>
<th>Cohabiting vs. Staying Single</th>
<th>Cohabiting vs. Marrying</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 1</td>
</tr>
<tr>
<td><strong>Panel A. Women</strong> <em>(n = 1,762)</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Time</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time single (years)</td>
<td><strong>1.02</strong></td>
<td><strong>1.02</strong></td>
<td><strong>.99</strong></td>
</tr>
<tr>
<td>Time single, squared</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Resources</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td><strong>.93</strong> ** **</td>
<td>1.00</td>
<td><strong>.87</strong> ***</td>
</tr>
<tr>
<td>Personal income (logged)</td>
<td>.96 *</td>
<td>.98</td>
<td>1.02</td>
</tr>
<tr>
<td>Total wealth (logged)</td>
<td><strong>1.11</strong> ***</td>
<td><strong>1.06</strong> ** **</td>
<td><strong>1.18</strong> ** **</td>
</tr>
<tr>
<td>Made financial transfer</td>
<td>.67 **</td>
<td><strong>1.18</strong> ** **</td>
<td><strong>1.76</strong> ** **</td>
</tr>
<tr>
<td>Income provision</td>
<td>.97</td>
<td>.81</td>
<td>.83</td>
</tr>
<tr>
<td><strong>Controls</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age (years)</td>
<td><strong>.93</strong> ***</td>
<td><strong>.93</strong> ***</td>
<td><strong>.94</strong> ***</td>
</tr>
<tr>
<td>Divorced (ref=widowed)</td>
<td><strong>2.07</strong> ***</td>
<td><strong>2.17</strong> ***</td>
<td><strong>1.87</strong> ***</td>
</tr>
<tr>
<td>Never married (ref=widowed)</td>
<td>1.90</td>
<td>1.86</td>
<td>2.02</td>
</tr>
<tr>
<td>White (ref=nonwhite)</td>
<td>1.27</td>
<td>1.06</td>
<td>2.06 ***</td>
</tr>
<tr>
<td>Good health (ref=poor health)</td>
<td><strong>2.94</strong> ***</td>
<td><strong>2.26</strong> ** **</td>
<td>.79</td>
</tr>
<tr>
<td>Fair health (ref=poor health)</td>
<td>1.98 *</td>
<td>1.68 *</td>
<td>.92</td>
</tr>
<tr>
<td>Has residential offspring</td>
<td>.79</td>
<td>.89</td>
<td>.80</td>
</tr>
<tr>
<td>High network contact (ref=low)</td>
<td>1.14</td>
<td>1.16</td>
<td>.90</td>
</tr>
<tr>
<td><strong>Panel B. Men</strong> <em>(n = 777)</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Time</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time single (years)</td>
<td><strong>1.01</strong></td>
<td><strong>1.01</strong></td>
<td>.95 *</td>
</tr>
<tr>
<td>Time single, squared</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Resources</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td><strong>.98</strong></td>
<td>.98</td>
<td>.94</td>
</tr>
<tr>
<td>Personal income (logged)</td>
<td>1.02</td>
<td>1.02</td>
<td>1.01</td>
</tr>
<tr>
<td>Total wealth (logged)</td>
<td><strong>1.11</strong> ** **</td>
<td><strong>1.07</strong> ** **</td>
<td><strong>.96</strong></td>
</tr>
<tr>
<td>Made financial transfer</td>
<td>.85</td>
<td>1.21</td>
<td>1.42</td>
</tr>
<tr>
<td>Income provision</td>
<td>.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Controls</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age (years)</td>
<td><strong>.98</strong></td>
<td>.99</td>
<td>.97</td>
</tr>
<tr>
<td>Divorced (ref=widowed)</td>
<td>.90</td>
<td>.93</td>
<td>1.50</td>
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<tr>
<td>Never married (ref=widowed)</td>
<td>1.87</td>
<td>1.92</td>
<td>.77</td>
</tr>
<tr>
<td>White (ref=nonwhite)</td>
<td>1.06</td>
<td>.94</td>
<td>.83</td>
</tr>
<tr>
<td>Good health (ref=poor health)</td>
<td>1.37</td>
<td>1.06</td>
<td>1.03</td>
</tr>
<tr>
<td>Fair health (ref=poor health)</td>
<td>1.33</td>
<td>1.14</td>
<td>1.23</td>
</tr>
<tr>
<td>Has residential offspring</td>
<td>1.48 *</td>
<td>1.48 *</td>
<td>1.02</td>
</tr>
<tr>
<td>High network contact (ref=low)</td>
<td>.97</td>
<td>.95</td>
<td>.61 †</td>
</tr>
</tbody>
</table>

*Note:* Relative risk ratios are reported. Underlined risk ratios are significantly different from the same ratio for men who are 50-64 year olds (Panel B of this table). Bolded ratios are significantly different from the same ratio for same-gender peers who are 65+ (Table 3). † *p < .10; * p < .05; ** p < .01; *** p < .001.
Table 3. Discrete-Time Multinomial Logistic Regressions of Partnering Among Single Individuals Aged 65+ (1998-2006 HRS)

<table>
<thead>
<tr>
<th></th>
<th>Marrying vs. Staying Single</th>
<th>Cohabitating vs. Staying Single</th>
<th>Cohabitating vs. Marrying</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 1</td>
</tr>
<tr>
<td><strong>Panel A. Women</strong> <em>(n = 5,733)</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Time</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time single (years)</td>
<td>**.92 *****</td>
<td>**.92 *****</td>
<td>**.95 ***</td>
</tr>
<tr>
<td>Time single, squared</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Resources</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>**1.11 **</td>
<td>1.03</td>
<td><strong>1.04</strong></td>
</tr>
<tr>
<td>Personal income (logged)</td>
<td>.95 *</td>
<td>.97</td>
<td>1.03</td>
</tr>
<tr>
<td>Total wealth (logged)</td>
<td>**1.34 *****</td>
<td>**1.16 **</td>
<td><strong>1.62</strong></td>
</tr>
<tr>
<td>Made financial transfer</td>
<td>.74 *</td>
<td></td>
<td><strong>1.62</strong></td>
</tr>
<tr>
<td>Income provision</td>
<td>1.53</td>
<td>1.60</td>
<td></td>
</tr>
<tr>
<td><strong>Controls</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age (years)</td>
<td>**.91 *****</td>
<td>**.92 *****</td>
<td>**.94 ***</td>
</tr>
<tr>
<td>Divorced (ref=widowed)</td>
<td>2.40 **</td>
<td>2.57 **</td>
<td>4.23 **</td>
</tr>
<tr>
<td>Never married (ref=widowed)</td>
<td>a</td>
<td>a</td>
<td>a</td>
</tr>
<tr>
<td>White (ref=nonwhite)</td>
<td>1.71 †</td>
<td>1.32</td>
<td>1.30</td>
</tr>
<tr>
<td>Good health (ref=poor health)</td>
<td>2.65 *</td>
<td>1.93</td>
<td>.85</td>
</tr>
<tr>
<td>Fair health (ref=poor health)</td>
<td>1.72</td>
<td>1.41</td>
<td>.73</td>
</tr>
<tr>
<td>Has residential offspring</td>
<td>.48 **</td>
<td>.46 **</td>
<td>.63</td>
</tr>
<tr>
<td>High contact (ref=low contact)</td>
<td>.84</td>
<td>.81</td>
<td>.82</td>
</tr>
<tr>
<td><strong>Panel B. Men</strong> <em>(n = 2,179)</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Time</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time single (years)</td>
<td>**.92 *****</td>
<td>**.92 *****</td>
<td>**.98 ***</td>
</tr>
<tr>
<td>Time single, squared</td>
<td>1.01 **</td>
<td>1.01 **</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Resources</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>**1.06 **</td>
<td>1.04</td>
<td>1.04</td>
</tr>
<tr>
<td>Personal income (logged)</td>
<td>.99</td>
<td>.99</td>
<td>.99</td>
</tr>
<tr>
<td>Total wealth (logged)</td>
<td>1.13 **</td>
<td>1.08 *</td>
<td><strong>1.62</strong></td>
</tr>
<tr>
<td>Made financial transfer</td>
<td><strong>1.25</strong></td>
<td>1.38</td>
<td>1.38</td>
</tr>
<tr>
<td>Income provision</td>
<td>.65</td>
<td>.27</td>
<td></td>
</tr>
<tr>
<td><strong>Controls</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age (years)</td>
<td>**.95 *****</td>
<td>**.95 *****</td>
<td>**.94 *****</td>
</tr>
<tr>
<td>Divorced (ref=widowed)</td>
<td>1.47 †</td>
<td>1.55 †</td>
<td>1.81 *</td>
</tr>
<tr>
<td>Never married (ref=widowed)</td>
<td>a</td>
<td>a</td>
<td>a</td>
</tr>
<tr>
<td>White (ref=nonwhite)</td>
<td>1.11</td>
<td>.94</td>
<td>1.06</td>
</tr>
<tr>
<td>Good health (ref=poor health)</td>
<td>1.16</td>
<td>.96</td>
<td>1.42</td>
</tr>
<tr>
<td>Fair health (ref=poor health)</td>
<td>.72</td>
<td>.62</td>
<td>1.13</td>
</tr>
<tr>
<td>Has residential offspring</td>
<td>1.17</td>
<td>1.23</td>
<td>.43 †</td>
</tr>
<tr>
<td>High contact (ref=low contact)</td>
<td>.69</td>
<td>.67</td>
<td>.90</td>
</tr>
</tbody>
</table>

*Note:* Relative risk ratios are reported. Underlined risk ratios are significantly different from the same ratio for men who are 65+ (Panel B of this table). Bolded ratios are significantly different from the same ratio for same-gender peers who are 50-64 (Table 2). † *p < .10; * *p < .05; ** *p < .01; *** *p < .001.

* The cell size is too small for reliable estimates of the covariates.
Table 4. Sensitivity Test of the Effects of Variant Wealth Measures (Logged) on Later-Life Partnering Among Single Older Adults, by Gender and Age (1998-2006 HRS)

Note: "Positive" denotes an RRR that is significantly greater than 1.00 (at least *p* < .05); "ns" denotes not significant. Each variant measure of wealth was logged and was included in separate models in place of logged total wealth. These supplemental analyses include the full model shown in Tables 2 and 3.

<table>
<thead>
<tr>
<th>Panel A. Women</th>
<th>Remarry vs. Single</th>
<th>Cohabit vs. Single</th>
<th>Cohabit vs. Remarry</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aged 50-64</td>
<td>Aged 65+</td>
<td>Aged 50-64</td>
</tr>
<tr>
<td>Total wealth (reference from model 2)</td>
<td>Positive</td>
<td>Positive</td>
<td>Positive</td>
</tr>
<tr>
<td>Financial wealth</td>
<td>Positive</td>
<td>Positive</td>
<td>Positive</td>
</tr>
<tr>
<td>Nonfinancial wealth</td>
<td>Positive</td>
<td>Positive</td>
<td>Positive</td>
</tr>
<tr>
<td>Panel B. Men</td>
<td>Total wealth (reference from model 2)</td>
<td>Positive</td>
<td>Positive</td>
</tr>
<tr>
<td>Financial wealth</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Nonfinancial wealth</td>
<td>Positive</td>
<td>Positive</td>
<td>Positive</td>
</tr>
<tr>
<td>Resources</td>
<td>Whole Sample</td>
<td>Women (50-64)</td>
<td>Women (65+)</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>--------------</td>
<td>---------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Education (years)</td>
<td>12.16 (3.27)</td>
<td>12.25 *† (3.03)</td>
<td>11.97 (3.07)</td>
</tr>
<tr>
<td>Personal income ($)</td>
<td>19,637.02 (180,903.50)</td>
<td>17,669.83 *† (26,771.04)</td>
<td>2,803.13 † (14,958.97)</td>
</tr>
<tr>
<td>Total wealth ($)</td>
<td>326,803.50 (787,853.70)</td>
<td>291,739.80 * (797,861.80)</td>
<td>372,436.80 † (707,661.00)</td>
</tr>
<tr>
<td>Financial wealth ($)</td>
<td>86,118.43 (461,551.40)</td>
<td>78,845.30 *† (515,570.80)</td>
<td>90,444.33 † (204,629.80)</td>
</tr>
<tr>
<td>Nonfinancial wealth ($)</td>
<td>239,056.30 (550,287.30)</td>
<td>210,501.90 *† (516,979.41)</td>
<td>282,469.20 (588,299.00)</td>
</tr>
<tr>
<td>Made financial transfer</td>
<td>.31</td>
<td>.32</td>
<td>.34 †</td>
</tr>
<tr>
<td>Income provision</td>
<td>.06</td>
<td>.06</td>
<td>.06</td>
</tr>
<tr>
<td>Controls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohabitation length (years)</td>
<td>3.04 (2.13)</td>
<td>2.69 *† (1.88)</td>
<td>3.92 † (2.43)</td>
</tr>
<tr>
<td>Age (years)</td>
<td>60.23 (11.05)</td>
<td>53.12 *† (7.66)</td>
<td>72.33 (6.57)</td>
</tr>
<tr>
<td>Female</td>
<td>.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>.49</td>
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<td></td>
</tr>
<tr>
<td>Divorced</td>
<td>.60</td>
<td>.63 *†</td>
<td>.40 †</td>
</tr>
<tr>
<td>Never married</td>
<td>.16</td>
<td>.19 *</td>
<td>.07 †</td>
</tr>
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<td>Widowed</td>
<td>.24</td>
<td>.18 *†</td>
<td>.53 †</td>
</tr>
<tr>
<td>White</td>
<td>.66</td>
<td>.65 *†</td>
<td>.78 †</td>
</tr>
<tr>
<td>Nonwhite</td>
<td>.33</td>
<td>.35 *†</td>
<td>.22 †</td>
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<tr>
<td>Good health</td>
<td>.40</td>
<td>.41 *†</td>
<td>.34 †</td>
</tr>
<tr>
<td>Fair health</td>
<td>.48</td>
<td>.46 *†</td>
<td>.52</td>
</tr>
<tr>
<td>Poor health</td>
<td>.12</td>
<td>.14 *†</td>
<td>.14 †</td>
</tr>
<tr>
<td>Residential offspring</td>
<td>.19</td>
<td>.23 *†</td>
<td>.12 †</td>
</tr>
<tr>
<td>No residential offspring</td>
<td>.81</td>
<td>.77 *†</td>
<td>.88 †</td>
</tr>
<tr>
<td>High network contact</td>
<td>.13</td>
<td>.14 †</td>
<td>.14 †</td>
</tr>
<tr>
<td>Low network contact</td>
<td>.77</td>
<td>.76 †</td>
<td>.76 †</td>
</tr>
</tbody>
</table>

| N                                | 1,336        | 478           | 202         | 385         | 271       |

1 Reference category in multivariate analyses in Chapter 5.

* Persons in the younger age category significantly differ from their same-gender peers in the older age category (at least $p < .10$)

† Women significantly differ from their same-age male counterparts (at least $p < .10$)

Table 5. Summary Statistics of Older Cohabiters by Gender and Age ($N = 1,336$) (1998-2006 HRS)
### Panel A. Older Women (n = 478)

**Time**

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohabitation duration (years)</td>
<td><strong>1.53</strong> ***</td>
<td><strong>1.55</strong> ***</td>
<td><strong>1.41</strong> ***</td>
<td><strong>1.41</strong> ***</td>
</tr>
<tr>
<td>Cohabitation duration, squared</td>
<td><strong>.78</strong> ***</td>
<td><strong>.78</strong> ***</td>
<td><strong>.84</strong> ***</td>
<td><strong>.83</strong> ***</td>
</tr>
</tbody>
</table>

**Resources**

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education (years)</td>
<td><strong>1.03</strong> ***</td>
<td><strong>1.02</strong> *</td>
<td><strong>.96</strong> ***</td>
<td><strong>.99</strong></td>
</tr>
<tr>
<td>Personal income (logged)</td>
<td><strong>.97</strong> **</td>
<td><strong>.99</strong></td>
<td><strong>.97</strong> **</td>
<td><strong>1.01</strong></td>
</tr>
<tr>
<td>Total net worth (logged)</td>
<td><strong>1.09</strong> ***</td>
<td><strong>1.09</strong> ***</td>
<td><strong>1.04</strong> ***</td>
<td><strong>1.04</strong> ***</td>
</tr>
<tr>
<td>Made financial transfer</td>
<td><strong>1.70</strong> ***</td>
<td><strong>1.70</strong> ***</td>
<td><strong>1.97</strong></td>
<td><strong>.89</strong></td>
</tr>
<tr>
<td>Income provision</td>
<td><strong>1.95</strong> ***</td>
<td><strong>1.95</strong> ***</td>
<td><strong>1.95</strong> ***</td>
<td><strong>1.95</strong> ***</td>
</tr>
</tbody>
</table>

**Controls**

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td><strong>.98</strong> **</td>
<td><strong>.98</strong> **</td>
<td><strong>1.02</strong> **</td>
<td><strong>1.02</strong> **</td>
</tr>
<tr>
<td>Divorced (ref=widowed)</td>
<td><strong>1.26</strong> **</td>
<td><strong>1.30</strong> *</td>
<td><strong>.97</strong></td>
<td><strong>.98</strong></td>
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<tr>
<td>Never married (ref=widowed)</td>
<td><strong>.87</strong></td>
<td><strong>.94</strong></td>
<td><strong>1.05</strong></td>
<td><strong>1.05</strong></td>
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<tr>
<td>White (ref=nonwhite)</td>
<td><strong>1.16</strong></td>
<td><strong>1.09</strong></td>
<td><strong>.67</strong> **</td>
<td><strong>.65</strong> **</td>
</tr>
<tr>
<td>Good health (ref=poor health)</td>
<td><strong>1.64</strong> *</td>
<td><strong>1.33</strong> †</td>
<td><strong>1.18</strong></td>
<td><strong>1.18</strong></td>
</tr>
<tr>
<td>Fair health (ref=poor health)</td>
<td><strong>1.16</strong></td>
<td><strong>1.08</strong></td>
<td><strong>.97</strong></td>
<td><strong>1.08</strong></td>
</tr>
<tr>
<td>Has residential offspring</td>
<td><strong>1.31</strong> *</td>
<td><strong>1.27</strong> *</td>
<td><strong>1.12</strong></td>
<td><strong>1.12</strong></td>
</tr>
<tr>
<td>High contact (ref=low contact)</td>
<td><strong>1.27</strong> *</td>
<td><strong>1.23</strong> †</td>
<td><strong>1.23</strong> *</td>
<td><strong>1.20</strong> †</td>
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</tbody>
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### Panel B. Older Men (n = 385)

**Time**

<table>
<thead>
<tr>
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<th>Model 2</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohabitation duration (years)</td>
<td><strong>1.36</strong> ***</td>
<td><strong>1.35</strong> ***</td>
<td><strong>1.31</strong> ***</td>
<td><strong>1.32</strong> ***</td>
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<tr>
<td>Cohabitation duration, squared</td>
<td><strong>.81</strong> **</td>
<td><strong>.81</strong> **</td>
<td><strong>.79</strong> ***</td>
<td><strong>.79</strong> ***</td>
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</tbody>
</table>

**Resources**

<table>
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<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education (years)</td>
<td><strong>1.06</strong> ***</td>
<td><strong>1.03</strong> **</td>
<td><strong>1.02</strong> *</td>
<td><strong>1.01</strong></td>
</tr>
<tr>
<td>Personal income (logged)</td>
<td><strong>1.02</strong> *</td>
<td><strong>1.01</strong></td>
<td><strong>.95</strong> ***</td>
<td><strong>.99</strong></td>
</tr>
<tr>
<td>Total net worth (logged)</td>
<td><strong>1.07</strong> ***</td>
<td><strong>1.07</strong> ***</td>
<td><strong>.97</strong> ***</td>
<td><strong>.97</strong> ***</td>
</tr>
<tr>
<td>Made financial transfer</td>
<td><strong>1.55</strong> ***</td>
<td><strong>1.55</strong> ***</td>
<td><strong>1.42</strong> ***</td>
<td><strong>1.42</strong> ***</td>
</tr>
<tr>
<td>Income provision</td>
<td><strong>1.33</strong> ***</td>
<td><strong>1.33</strong> ***</td>
<td><strong>1.33</strong> ***</td>
<td><strong>1.33</strong> ***</td>
</tr>
</tbody>
</table>

**Controls**

<table>
<thead>
<tr>
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<th>Model 1</th>
<th>Model 2</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td><strong>1.03</strong> *</td>
<td><strong>1.03</strong> *</td>
<td><strong>1.02</strong> **</td>
<td><strong>1.02</strong> **</td>
</tr>
<tr>
<td>Divorced (ref=widowed)</td>
<td><strong>.67</strong> *</td>
<td><strong>.67</strong> *</td>
<td><strong>1.37</strong></td>
<td><strong>1.35</strong></td>
</tr>
<tr>
<td>Never married (ref=widowed)</td>
<td><strong>.78</strong></td>
<td><strong>.86</strong></td>
<td><strong>.98</strong></td>
<td><strong>1.05</strong></td>
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<tr>
<td>White (ref=nonwhite)</td>
<td><strong>1.41</strong> **</td>
<td><strong>1.63</strong> ***</td>
<td><strong>.92</strong></td>
<td><strong>.95</strong></td>
</tr>
<tr>
<td>Good health (ref=poor health)</td>
<td><strong>2.66</strong> ***</td>
<td><strong>2.66</strong> ***</td>
<td><strong>2.88</strong> **</td>
<td><strong>2.90</strong> ***</td>
</tr>
<tr>
<td>Fair health (ref=poor health)</td>
<td><strong>2.73</strong> ***</td>
<td><strong>2.73</strong> ***</td>
<td><strong>3.05</strong> ***</td>
<td><strong>3.07</strong> ***</td>
</tr>
<tr>
<td>Has residential offspring</td>
<td><strong>1.50</strong> **</td>
<td><strong>1.42</strong> **</td>
<td><strong>1.26</strong> †</td>
<td><strong>1.27</strong> †</td>
</tr>
<tr>
<td>High contact (ref=low contact)</td>
<td><strong>1.29</strong> *</td>
<td><strong>1.25</strong> †</td>
<td><strong>.99</strong></td>
<td><strong>.99</strong></td>
</tr>
</tbody>
</table>

**Note**: The outcome category is remaining in a cohabiting union. Relative risk ratios are reported. Underlined risk ratios are significantly different from the same ratio for men who are 50-64 (Panel B of this table). Bolded ratios are significantly different from the same ratio for same-gender peers who are 65+ (Table 7). † * p < .10; * p < .05; ** p < .01; *** p < .001.

Table 6. Stability of Cohabiting Unions Among Individuals Aged 50-64, Discrete-Time Multinomial Logistic Regression (1998-2006 HRS)
### Panel A. Older Women (n = 202)

**Time**
- Cohabitation duration (years) \(0.43^{***}\) \(0.43^{***}\) \(0.78^{***}\) \(0.79^{***}\)
- Cohabitation duration, squared \(1.04^{***}\) \(1.06^{***}\) \(0.98\) \(0.99\)

**Resources**
- Education (years) \(1.04^{*}\) 1.01 0.98 1.00
- Personal income (logged) 0.98 0.99 0.95 ** 0.99
- Total net worth (logged) \(1.04^{**}\) \(0.95^{**}\) \(0.89^{***}\)
- Made financial transfer \(2.38^{***}\) \(1.79^{***}\)
- Income provision 3.09 *** 2.21 **

**Controls**
- Age 0.97 1.00 0.98 † 0.98
- Divorced (ref=widowed) 0.89 0.90 1.17 * 1.17 *
- Never married (ref=widowed) 0.84 0.91 1.83 * 2.12 *
- White (ref=nonwhite) \(0.47^{***}\) \(0.44^{***}\) 0.86 0.86
- Good health (ref=poor health) 0.78 0.59 1.56 ** 1.56 **
- Fair health (ref=poor health) 0.81 0.81 1.19 1.21
- Has residential offspring 1.09 * 1.11 * 1.35 † 1.36 †
- High contact (ref=low contact) 1.90 ** 1.81 * 1.73 ** 1.83 **

### Panel B. Older Men (n = 271)

**Time**
- Cohabitation duration (years) \(0.66^{***}\) \(0.67^{***}\) \(0.61^{***}\) \(0.61^{***}\)
- Cohabitation duration, squared \(1.05^{***}\) \(1.04^{***}\) \(1.02^{**}\) \(1.02^{**}\)

**Resources**
- Education (years) 1.09 *** 1.03 * 1.05 *** 1.02
- Personal income (logged) 0.98 1.00 0.97 ** 1.01
- Total net worth (logged) 1.07 ** \(0.94^{**}\) \(0.82\)
- Made financial transfer \(2.38^{***}\) \(1.79^{***}\)
- Income provision 1.19 2.11 **

**Controls**
- Age (years) 0.94 *** 0.94 *** 1.01 1.03
- Divorced (ref=widowed) 1.03 1.11 1.90 *** 1.82 **
- Never married (ref=widowed) 0.72 0.87 2.07 *** 2.01 **
- White (ref=nonwhite) 0.99 1.03 1.12 † 1.06
- Good health (ref=poor health) 1.65 ** 1.65 ** 1.18 1.19
- Fair health (ref=poor health) 1.92 1.79 1.07 .94
- Has residential offspring 1.03 1.03 .74 ** .77 **
- High contact (ref=low contact) 0.97 0.98 .69 * .69 *

*Note*: The outcome category is remaining in a cohabiting union. Relative risk ratios are reported. Underlined risk ratios are significantly different from the same ratio for men who are 65+ (Panel B of this table). Bolded ratios are significantly different from the same ratio for same-gender peers who are 50-64 (Table 6). † \(p < .10\); * \(p < .05\); ** \(p < .01\); *** \(p < .001\).

Table 7. Stability of Cohabiting Unions Among Individuals Aged 65+, Discrete-Time Multinomial Logistic Regression (1998-2006 HRS)
### Table 8. Sensitivity Test of the Effects of Variant Wealth Measures (Logged) on Later-Life Cohabitation Stability, by Gender and Age (1998-2006 HRS)

<table>
<thead>
<tr>
<th>Panel A. Older Women</th>
<th>Marry</th>
<th>Separate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aged 50-64</td>
<td>Aged 65+</td>
</tr>
<tr>
<td>Total net worth (reference from Table 2)</td>
<td>Positive</td>
<td>Negative</td>
</tr>
<tr>
<td>Financial wealth</td>
<td>Positive</td>
<td>ns</td>
</tr>
<tr>
<td>Nonfinancial wealth</td>
<td>Positive</td>
<td>Negative</td>
</tr>
</tbody>
</table>

**Panel B. Older Men**

<table>
<thead>
<tr>
<th></th>
<th>Marry</th>
<th>Separate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aged 50-64</td>
<td>Aged 65+</td>
</tr>
<tr>
<td>Total net worth (reference from Table 2)</td>
<td>Positive</td>
<td>Positive</td>
</tr>
<tr>
<td>Financial wealth</td>
<td>Positive</td>
<td>Positive</td>
</tr>
<tr>
<td>Nonfinancial wealth</td>
<td>Positive</td>
<td>Positive</td>
</tr>
</tbody>
</table>

**Note:** "Positive" denotes an RRR that is significantly greater than 1.00, "negative" denotes an RRR smaller than 1.00 (at least \( p < .05 \)); "ns" denotes not significant. Each desegregated wealth measure was logged and was included in separate models in place of total wealth. The supplemental analyses included the full set of predictors and controls from Model 2 (Tables 6 and 7).
Appendix B

Figures
Figure 1. Economic Resources of Single Older Women by Resource Type, Partnering Status, and Age (1998–2006 HRS)
Figure 2. Economic Resources of Single Older Men by Resource Type, Partnering Status, and Age (1998–2006 HRS)
Figure 3. Percentage of Single Older Women Engaging in Financial Transfers and Income Provision by Partnering Status and Age (1998–2006 HRS)
Figure 4. Percentage of Single Older Men Engaging in Financial Transfers and Income Provision by Partnering Status and Age (1998–2006 HRS)
Figure 5. Economic Resources of Older Cohabiting Women by Resource Type, Partnering Status, and Age (1998–2006 HRS)
Figure 6. Economic Resources of Older Cohabiting Men by Resource Type, Partnering Status, and Age (1998–2006 HRS)
Figure 7. Percentage of Older Cohabiting Women Engaging in Financial Transfers and Income Provision by Transition Experience and Age (1998–2006 HRS)
Figure 8. Percentage of Older Cohabiting Men Engaging in Financial Transfers and Income Provision by Transition Experience and Age (1998–2006 HRS)
Figure 9. Survivor Curves of Cohabiting Unions Among Older Adults (Aged 50–64) Across Years Since Cohabitation by Gender (1998–2006 HRS)
Figure 10. Survivor Curves of Cohabiting Unions Among Older Adults (Aged 65+) Across Years Since Cohabitation by Gender (1998–2006 HRS)