Joint investments in marriage and cohabitation: The role of legal and symbolic factors

Anne-Rigt Poortman* & Melinda Mills**

* Department of Sociology/ICS, University of Utrecht, The Netherlands (a.poortman@uu.nl)

* Department of Sociology/ICS, University of Groningen, The Netherlands (m.c.mills@rug.nl)

Preliminary draft (March 7, 2008) – not to be quoted

Prepared for the Annual Meeting of the Population Association of America, New Orleans, April 17-19, 2008

Abstract

In comparison to married couples, cohabiters have been found to invest less in their relationship. This research joins the ongoing debate between the advocates of marriage and their skeptics by examining the role of whether it is selection or real differences between cohabitation and marriage that determine relationship investments. We adopt an approach that focuses on the role of presumed real differences and develop a legal and symbolic continuum of commitment to compare differences in the economic (specialization in labor) and social (joint friends and family and leisure activities) investments. We do so by taking into account different legal arrangements within married and cohabiting couples, marriage plans among cohabiters, and premarital cohabitation among married couples. Using longitudinal survey data from the Netherlands (NKPS), we estimate a series of multilevel random effects models. Results show little support for the role of legal aspects, but strong support for the role of symbolic factors in predicting joint investments. Marriage appears to be a sign of commitment and permanence, at least for the largest and growing group of Dutch cohabiters who plan to and eventually will marry. Marriage, however, does not lead to a change in joint investments and marriage may rather confirm than foster commitment. Our results also suggest that cohabiters without marriage intentions are a distinct group for whom cohabitation is an alternative to marriage rather than a path leading to marriage.

INTRODUCTION

Although cohabitation has rapidly become as common as marriage in many Western societies, the relationships of cohabiters has been shown to be markedly different (Seltzer, 2000; Smock, 2000). In comparison to married couples, cohabiters are less likely to adopt a specialized division of labor (Brines & Joyner, 1999; South & Spitze, 1994), keep their finances and property separate (Heimdal & Houseknecht, 2003) and live separate lives (Kalmijn & Bernasco, 2001). This lack of joint investments has been argued to lead to fewer interdependencies and greater instability in cohabiting unions (Brines & Joyner, 1999).

Why are cohabiters less inclined to invest in the relationship in comparison to married couples? An ongoing debate in the United States between the advocates of marriage (e.g., Waite & Gallagher, 2000) and the skeptics (e.g., Smock & Manning, 2004) has led to two prominent explanations. First, investment differences may be explained by selection. Persons with progressive norms, for instance, may be more apt to cohabit and are effectively 'selected' into cohabitation (Smock, 2000) with these norms also leading partners to adopt more individualized arrangements. Second, fewer joint investments may represent 'real' differences between marriage and cohabitation. Taking this perspective, marriage is assumed to be a social institution that has the power to change people's behavior (Waite & Gallagher, 2000: 17).

Empirical research has yet to conclusively resolve the debate. The majority of studies have examined the role of selection by trying to control for selective entry into cohabitation, but mixed findings prompt us to ask whether selection actually explains all of the differences (see review by Smock, 2000). To advance our understanding of this topic, we adopt a different approach that focuses instead on the role of presumed real differences. Following earlier arguments (Brines & Joyner, 1999; Cherlin, 2000; Waite & Gallagher, 2000), we maintain that the nature of commitment in marriage differs from cohabitation in two respects. First, marriage is *legally* different as it consists of a legally enforceable contract that reduces the risks of joint investments in the event that the union ends, at least in financial terms (Brines & Joyner, 1999). Second, marriage is *symbolically* different because it signals long-term commitment, not only to the partners themselves, but also as a public affirmation (Brines & Joyner, 1999; Cherlin, 2000). These symbolic and legal features make it less risky for married couples to invest. Cohabiters will be cautious to do so, because of uncertainty about the stability of the relationship and the absence of laws to protect them against the risks of such investments.

We extend this argument further by maintaining that the legal and symbolic features of marriage may also be present for certain cohabiting couples. Cohabiters can draw up a legal contract, in which they can protect themselves from running excessive risks of joint investments. In addition, some cohabiters may be as committed to their relationship as married couples, which reduces the perceived risks of joint investments as well. Similarly, married couples may choose for a less protective contract than the default marriage contract or may be more willing to commit by marrying without a trial period. To gain greater insight into differences between cohabitation and marriage, we go beyond a dichotomy of marriage versus cohabitation by proposing a legal and symbolic 'continuum of commitment'. We contend that commitment levels vary not only between cohabiters and those who marry, but also *within* these groups. The legal continuum of commitment is represented by increasing levels of commitment (Giesen, 1999; Hogerbrugge & Dykstra, 2007): (1) cohabiters without a contract, (2) cohabiters with a formal contract, (3) married with a prenuptial agreement; and, (4) married with joint property. The symbolic continuum of commitment mirrors increasing levels of commitment ranging from: (1) cohabiters without marriage intentions or uncertain plans, (2) cohabiters with marriage intentions, (3) married after a period of cohabitation; and, (4) direct marriage. We will argue that if legal and symbolic aspects differentiate marriage from cohabitation, such differences should be reflected in an increase in joint investments with increasing levels of commitment on our more continuous categorization.

To examine the impact of legal and symbolic commitment, we compare differences in economic and social investments in the relationship via four dependent variables. Economic investments refer to the division of labor in the household, which is indicated by specialization in: 1) paid and 2) unpaid labor. Social investments refer to the extent to which partners have: 1) shared friends and family and 2) jointly participate in leisure activities. We focus on the Netherlands. Since the 1970s, cohabitation in the Netherlands has been on the rise and is now the standard first relationship for most individuals (Liefbroer & Dykstra, 2000; Mills, 2004). In this sense, this country is very similar to many of its close European neighbors. Most cohabiting couples either separate within a few years or proceed to marriage, suggesting that cohabitation is nowadays often used as a trial-period among young cohorts (Liefbroer & Dykstra, 2000). The Dutch context is ideal to study legal arrangements, in that cohabitation contracts and registered partnerships, which is another way to formalize cohabiting relationships, were introduced quite early. Already since the 1970s, it was common to draw up legal cohabitation contracts, and the Dutch law introduced registered

partnerships in 1998, which is a formalized non-marital partnership (Boele-Woelki et al., 2007; Waaldijk, 2000).

Longitudinal survey data are used to address our research aims, which have the advantage of capturing within-person changes. To examine such changes, previous studies have examined differences in partnership status between two time points, while controlling for outcome measures at the first time point, often examining only a small number of cases (e.g., Brown, 2004; Skinner et al., 2002). We employ an alternative method of multilevel random-effect models (Snijders & Bosker, 1999), which utilizes the longitudinal data in a different manner via multiple observations of respondents at both time points in order to control for selection on unmeasured characteristics.

THEORETICAL BACKGROUND AND PAST RESEARCH

Symbolic and legal continuum of commitment

The majority of studies to this point only examine differences between cohabitation and marriage, neglecting the role of marriage intentions on behavior among cohabiters (with the exception of Brown & Booth, 1996; Brown, 2004; Bumpass, Sweet & Cherlin, 1991; Ciabattari, 2004). Brown and Booth (1996) demonstrated that there appear to be two distinct groups of cohabiters represented by those who intend to marry, who are arguably more committed to the relationship, and those with no or uncertain plans (see also Brown, 2004). Yet others have drawn a distinction among the married, differentiating between those who commit directly to marriage and those who marry only after an initial 'trial' period of cohabitation (e.g, Nock, 1995; Manting, 1994; DeMaris & Rao, 1992). Most of this research has shown that those who cohabit before marriage often have unstable, lower quality relationships and higher levels of divorce (e.g., DeMaris & Rao, 1992; Manting, 1994; Schoen, 1992; Thomson & Colella, 1992), but some find no differences (e.g., Nock, 1995; Skinner et al., 2002). Building on this work we develop a continuum of symbolic commitment. In addition, we extend prior work by constructing a continuum of legal commitment by distinguishing different legal arrangements for marriage and cohabitation. So far, little research has made such distinctions (for an exception see Hogerbrugge & Dykstra, 2007).

We first propose a 'symbolic continuum of commitment,' shown in Figure 1, which ranges from low to higher levels of commitment: (1) cohabiters without marriage intentions or uncertain plans, (2) cohabiters with marriage intentions, (3) married after a period of

cohabitation, to the most symbolically committed group of (4) direct marriage. The first group represents the lowest level of commitment due to the lack of a clear indication of a long-term binding decision for the future. We know that most American cohabiters have intentions to marry their partner, with over half of these unions ending in marriage (Brown & Booth, 1996; Bumpass and Lu, 2000). Dutch data among young adults reveal that most prefer cohabitation, eventually followed by marriage (Liefbroer & De Jong Gierveld, 1993; Poortman & Liefbroer, 2005). The marriage intentions of cohabiters are often related to a need for the expression of greater commitment and stability, which is symbolized in marriage (Nock, 1995). Marriage is argued to even further increase levels of commitment to each other, as the strong normative expectations of marriage may enhance commitment by providing a clear set of institutional rules and clearly defined roles for husbands and wives (Nock, 1995). In addition, marriage intentions do not likely hold the weight or public declaration of the marriage vow that leads to "enforceable trust", which in turn may increase the level of joint investments after getting married (Cherlin, 2000: 136). We add that within the group of married people, direct marriage signals greater long-term commitment than marriage after cohabitation: directly married couples were ready to commit without a trial period.

Second, we propose a continuum of legal commitment. Nock (1995) contends that it is the 'structural and institutional' features of marriage that create the differences we observe between marriage and cohabitation. However, these claims have not been empirically assessed with the legal representation of commitment only recently explored in a few cases (see Hogerbrugge & Dykstra, 2007). We operationalize the institutionalization of unions by developing a 'legal continuum of commitment,' represented by increasing levels of commitment: (1) cohabiters without a contract, (2) cohabiters with a formal contract (cohabitation contract or registered partnership), (3) married with a prenuptial agreement; and, (4) married with joint property (see Figure 1).

[Here Figure 1]

In the context of economic investments, different types of legal arrangements offer more or less protection against the risks of specialization because they handle property, alimony, inheritance and paternity rights differently (see Giesen, 1999). As Brown (2004: 5) argues, there is a "clear demarcation of roles" and "privileges afforded to those who are legally married." This includes pooling health insurance benefits, resources and other joint investments. Being married and having joint property is the most protective as property (and

debts) are common by law. This entails that the lower income spouse is legally entitled to alimony, the spouse automatically inherits after death, and the husband is automatically the legal father of the children born in marriage. Marriage with prenuptial agreements represents a somewhat weaker level of commitment in that spouses have the option to decide whether their property is joint.

The 'institutionalization' of cohabitation has a long history in the Netherlands, with cohabitation contracts already common since the 1970s. In 1998, Dutch family law introduced an additional type of formalized non-marital partnership in the form of a 'registered partnership' (Boele-Woelki et al., 2007; Waaldijk, 2000). A registered partnership closely resembles marriage in that property is by definition joint, alimony has to be paid, and partners have rights of inheritance, but partners may draw up partnership agreements to change this. Paternity rights, however, are not included in this type of contract. A cohabitation contract entails that partners formalize their own agreements on joint property, inheritance and alimony rights with paternity rights once again omitted from this arrangement. Cohabiters without a contract, which is the largest group to be studied in the literature to this point, are the least protected as property is not by definition joint and partners have no alimony rights or rights of inheritance or paternity. We now relate the levels of symbolic and legal commitment to differences in economic and social investments in couples.

Joint economic and social investments

A guiding hypothesis of this study is that those with higher levels of symbolic and legal commitment will exhibit higher levels of joint economic and social investments. Joint investments can be examined by the extent to which the couple engages in mutual economic and social investments. Following Becker (1981), joint economic investments imply a specialization in the division of paid and unpaid household labor. Specialization occurs when one partner, generally the female, specializes in unpaid work with the other partner opting for a larger share of paid work. By doing this, the couple engages in a risky investment, which involves a high level of trust and commitment. In case the union dissolves, the one specialized in domestic labor has experienced a deterioration of human capital, may have difficulties in entering the labor market and shoulders a greater risk of financial loss and insecurity.

Previous research on domestic and paid labor patterns has shown that married couples tend to engage in a higher level of specialization than cohabiters (e.g., Bianchi, Milkie, Sayer & Robinson, 2000; Brines & Joyner, 1999; Kalmijn, Loeve & Manting, 2007; South & Spitze, 1994). The gender gap between men and women, with women doing the majority of

the housework, appears to persist across both types of partnerships (Hochschild, 1989; South & Spitze, 1994). Several explanations have been raised to explain why this may be the case. Besides pointing at selection, a central argument has been the level of formal institutionalization of the partnership (Cherlin, 1978; Nock, 1995). An important institutional feature of marriage is the legal contract that it entails, offering legal protection against the risk of economic investments. Particularly, joint property and alimony rights protect the partner who specializes in domestic work. Following this logic and given the variation in legal contracts within cohabiting and married couples, a stronger legalization or institutionalization of cohabiting and marital unions should translate into a higher level of specialization.

The symbolic meaning of marriage has also been put forward to explain married couples greater economic investments (Brines & Joyner, 1999). When partners have a long-term horizon and are sure about the stability of the relationship, it is less risky to adopt a specialized division of labor as the chances of actually running these risks due to separation or divorce are perceived as low. As explained previously, the level of such symbolic commitment may vary both within the groups of cohabiters and married couples. Hence, if the presumed permanence of marriage were a reason to invest more, we would expect to see similar differences among married and cohabiting couples who vary in their level of symbolic commitment. This leads to our first hypothesis: Couples with higher levels of legal and symbolic commitment will engage in a higher specialization in paid and unpaid labor than those with lower levels.

So far, little research has tested the hypothesis surrounding differences in specialization among cohabiters with and without marriage plans. However, Ciabattari (2004) demonstrated that the division of household labor also appears to vary within cohabiters, with cohabiting men with marriage intentions investing more in housework than those without marriage intentions. Also the research by Brown (e.g, Brown & Booth, 1996; Brown, 2004), suggest that there are differences among cohabiters, as those with marriage plans are quite similar with respect to relationship quality to married couples and have higher quality relationships than cohabiters without plans. More research has focused on differences among married couples, depending upon whether they cohabited before marriage – mostly in the context of marital stability. With a few exceptions (Nock, 1995; Skinner, 2002), most of this research suggests that the directly married are indeed more stable and invest more in the relationship (e.g., DeMaris & Rao, 1992; Manting, 1994; Schoen, 1992). To our knowledge no research has looked at legal variations and the extent of economic specialization.

The majority of the literature to this point has focused on differences in economic joint investments, with a focus on the specialization of household labor. Beyond economic investments, social investments may also play a key role in understanding differences between married and cohabiting couples. Social investments refer to the extent to which partners have shared friends and family and jointly participate in leisure activities. As with economic investments, such social investments entail a risk. Sharing social activities increases the costs of union dissolution, due to the fact that shared friends, family and a familiar person with whom to spend leisure time are lost (Kalmijn & Bernasco, 2001). Joint participation in leisure activities show a further bond and investment between the partners, where they would suffer serious personal losses if the relationship was to dissolve. Previous research has shown that cohabiting couples are less likely to participate in joint leisure activities than married couples (Kalmijn & Bernasco, 2001). In addition, cohabiters see their family less often than married couples and express poorer quality relationships with kin (Nock, 1995; Eggebeen,2005; Hogerbrugge & Dykstra, 2007). Although these studies did not examine the extent to which partners jointly engage in contacts with family and friends, there is one study hinting that this difference also pertains to joint contact as cohabiting couples are also less likely to visit their family in law (Hogerbrugge & Dykstra, 2007). The presumed permanence of marriage may again explain these differences (Kalmijn & Bernasco, 2001), because the risks of social investments are more hypothetical for those who are sure of their relationship. Since any type of contract cannot protect couples from such social losses, we expect that the role of contracts will be negligible for social investments. Following this logic and given the variations in symbolic commitment according to our continuum, we hypothesize that: Couples with higher levels of symbolic commitment will be more likely to share friends and family or to engage in joint leisure activities than those with lower levels.

Some scholars argue that marriage actually has the power to *change* people's behavior (e.g., Waite & Gallagher, 2000). It may be a logical expectation, since a marriage contract usually covers more aspects of the relationship and offers more security than the consensual-union contract. In addition, marriage entails a public vow that leads to "enforceable trust", which in turn may increase the level of joint investments after getting married (Cherlin, 2000: 136). If so, couples married after cohabitation would invest more than cohabiting couples with a contract and/or marriage intentions. In its most extreme form, this would also mean that there would be no differences within the group of married people depending upon the type of contract they have or the level of symbolic commitment. The abovementioned research so far suggests, however, otherwise (e.g., Brown, 2004; DeMaris & Rao, 1992; Manting, 1994).

Our discussion so far evolved around the presumed 'real' differences between marriage and cohabitation and the consequences these have for behavior. Other explanations may also hold, however. First, the direction of causality may be reversed (Bernasco & Giesen, 1999; Hogerbrugge & Dykstra, 2007). Rather than legal and symbolic commitment fostering joint investments due to greater certainty and legal protection, people may legally and symbolically commit themselves in anticipation of making joint investments. In other words, because couples want to specialize they get married or draw up a contract. Second, the effects may be precisely the other way around (ibid): in case of great uncertainty or few legal protection, couples may choose to jointly invest more (rather than less) in order to enhance their levels of security. Most importantly however, scholars have pointed at selective entry into cohabitation and marriage (Lillard, Brien & Waite, 1995; Smock, 2000). Cohabiters have certain characteristics that make them both more prone to cohabit as well as less likely to invest in the relationship. Most often cohabiters are said to be different because of their individualized and less traditional outlook on work and family (e.g., Liefbroer & Dourleijn, 2006; Manting, 2004; Smock, 2000). We therefore control for a range of social-demographic and socioeconomic characteristics known to be associated with both entry into cohabitation or marriage and joint investments.

METHODS

Data

We use data from the first and second wave of the Netherlands Kinship Panel Study (NKPS; Dykstra et al., 2005; Dykstra et al., 2007). The first wave was held between 2002 and 2004 and its follow up was conducted about three years later. The original sample was drawn randomly and representative with respect to region and urbanization. The overall response rate for wave 1 was 45%, which is comparable to the response rates of other Dutch family surveys. The sample had an overrepresentation of women, people in the middle age ranges, and people with children living at home (Dykstra et al., 2005). A face-to-face computer-assisted interview was held with 8,161 men and women. In addition, respondents filled in a self-administered questionnaire, which was returned in 92% of the cases (Dykstra et al., 2005). In case the respondent was living with a partner (either married or cohabiting), permission was asked to question this partner. If the respondent gave permission, a self-administrative questionnaire for the partner was left behind after the face-to-face interview. The response rate for partners was 72% (Dykstra et al., 2005).

In 2006 and 2007, the second wave of data collection took place. The overall response rate was 74% with higher non-response among men, non-church members, urban residents, young people, singles and lower educated people (Dykstra et al., 2007). The respondents were questioned by means of face-to-face computer assisted interviews, and at later stages also by means of computer assisted telephone (2.9%) or Internet interviews (1.4%). A self-administered questionnaire was left after the main interview and returned in 95% of the cases. Partners were also asked to fill in a questionnaire (if the respondent gave permission), but these data are not yet available. Because we control for partner characteristics and partner information is not present for wave 2, we have to rely on the information provided in wave 1 for partner characteristics. Subsequently, only unions already formed at wave 1 are eligible for our analyses.

We selected cohabiting and married heterosexual couples at wave 1 (N= 5,128). Due to the need for the written questionnaire to construct certain variables, we selected couples for which we received the self-administrative questionnaires of both partners (N=3,808). Furthermore, we excluded couples that have inconsistent or missing values on our dependent and central independent variables (n=3,795). Because we are interested in specialization in paid work, we also selected couples where the oldest partner was under the age of 65, which is the formal retirement age in the Netherlands. At wave 1, we are left with 572 cohabiting and 2,562 married couples. Of these 3,134 couples, 487 (16%) did not participate in wave 2, 119 had dissolved their relationship (4%) and 125 (4%) had missing values on the questions concerning joint investments at wave 2. This means that 76% (n= 2,403) of the couples at wave 1 have follow up information at wave 2.

Analytical strategy

We adopt a longitudinal approach because it has the advantage over cross-sectional data in that we can track couples over a longer period of time and that we can better deal with selection on unmeasured characteristics associated with marriage and cohabitation. A common approach has been to look at differences in the outcome of interest at wave 2 - in our case joint investments - depending upon changes in partnership status between wave 1 and 2, whilst controlling for outcome measures at wave 1 (see for example Brown, 2004; Skinner et al., 2002). In this way, within-person change is modeled, which to some extent overcomes the problem of selectivity on individual characteristics associated with marriage and cohabitation. These studies, however, often suffer from a small number of observations, which is also the case of our data, which does not contain enough cases to produce reliable estimates of the

partnership changes we are interested in. For example, only 32 couples changed from cohabitation without intentions to marry to cohabitation with marriage intentions (see Table 2, described in more detail shortly).

We therefore adopt a different method, which is relatively novel in this area of research, which utilizes the longitudinal character of our data. We constructed a person-period file in which the 2,403 couples for whom we have information at both waves contribute two observations to our dataset, whereas the remaining 731 couples for which we do not have a wave 2 follow-up contribute one observation to the dataset. In total, we have 5,537 observations for 3,134 couples. The multiple observations per couple allow us to control to some extent for selection on unmeasured characteristics. We estimate multilevel random-effect models (Snijders & Bosker, 1999). Multilevel analyses take into account the dependency among observations resulting from observing couples twice. In addition, these models take into account unobserved heterogeneity at the individual level by estimating a random disturbance term at the individual level (Snijders & Bosker, 1999). By doing this, selectivity on unmeasured stable characteristics of individuals is to some extent taken into account. Yet we acknowledge that perfect control is not possible, which holds for other methods as well (Steele, Sigle-Rushton & Kravdal, 2007). Selectivity is also taken into account by controlling for measured characteristics that are known to be associated with both joint investments and entry into marriage or cohabitation. Our main interest is however not in the role that selection plays, but in legal and symbolic differences that are theoretically informed by the presumed real differences between marriage and cohabitation.

We are aware that selectivity may still account for observed differences between the distinguished union types on the basis of the implied legal and symbolic commitment. Although little is known about which individuals choose certain legal arrangements or who wants to marry, it is likely that individual characteristics known to affect entry into marriage or cohabitation per se, such as progressive attitudes, are also related to the extent of legal and symbolic commitment. As a first step in the analyses, we will therefore address such differences empirically. We present descriptive findings on how the different union types differ with respect to partners' social-demographic and socioeconomic characteristics (e.g., age, education, religiosity, attitudes) and couple characteristics (e.g, union duration, children). We also present descriptive figures on the change and stability in legal and symbolic commitment from wave 1 to wave 2, to further enhance our understanding of any differences.

As a second step, an additional goal was to replicate prior findings and assess whether, in general, married couples differ from cohabiting couples in their economic and social

investments in the relationship. Multilevel random effect models of joint investment including being married (versus cohabiting) and control variables as independent variables are estimated. Finally, and most importantly, we address the role of legal and symbolic aspects by including our measures of legal and symbolic commitment in the multilevel analyses.

Measures of the dependent variables

Our dependent variables are joint investments in the partner relationship. Economic investments refer to extent of specialization in: (1) paid and (2) unpaid labor. Social investments refer to the extent to which partners have: (1) shared friends and family and (2) joint leisure activities.

Specialization in paid labor. At both wave 1 and 2, primary respondents were asked to report on their own and their partner's actual weekly working hours. On the basis of this information we constructed a variable indicating the extent to which either partner specializes in paid work, divided by: (1) no specialization (a partner contributes 45-55% to the total number of hours worked by both partners), (2) some specialization (a partner contributes 55-80%), and (3) complete specialization (a partner contributes more than 80%). In the case where both partners were not employed, we assigned the score of 0 hours and assumed that they had an equal division of paid work (i.e., first category). In less than 10% of the cases, it was the female partner specializing in paid work (i.e., her contribution > 55%). Overall, some specialization was the most common pattern in our dataset (45%), followed by complete (34%) and no specialization (21%). Complete specialization reflects the persistence of the male-breadwinner model, with some specialization representing the common Dutch 'one-and-a-half-earner' model where the male works full time and the female partner engages in part-time work. We constructed a discrete rather than continuous variable, because a continuous variant was not normally distributed, with peaks at the extremes of an equal division of paid work and of complete specialization.

Specialization in unpaid labor. At both waves, the respondent reported whether they themselves or their partner did more cooking, cleaning or grocery shopping, ranging from 1 "me always" to 5 "partner always". We focus on these tasks because these have to be done on a regular basis. We made the items gender specific and recoded the original scores to percentages contributed by the female partner to household labor, ranging from 5% (=male partner always) to 95% (=female partner always). We then averaged the percentage scores on cooking, cleaning and shopping and constructed a discrete variable with three categories: (1) no specialization in unpaid labor (a partner contributes 50 - 60%), (2) some specialization (a

partner contributes 60-80%), and (3) complete specialization (a partner contributes over 80%). This discrete representation is chosen for reasons of comparability with the other dependent variables. The Cronbach's alpha (for full sample at wave 1) indicates reasonable reliability (0.65). Again, some specialization was the most common (43%) variant, followed by complete (32%) and no specialization (25%).

Joint friends and family. Respondents were asked (in both waves) to indicate whether they visited their family usually with or without their partner, ranging from 1 "usually without partner" to 4 "usually with partner", and similarly for friends. In addition, they were asked whether they had common friends, ranging from 1 "mostly own friends" to 4 "mostly common friends." We averaged the scores on these items, leading to an overall measure for the extent of shared friends and family (Cronbach's alpha wave 1= 0.60). After rounding the scores and combining the two lower categories which consisted of too few cases, the resulting variable consists of the following categories: (1) usually/more often separate from partner, (2) more often joint, and (3) usually joint. Separate visits are relatively uncommon (20%) and most indicate that they more often visit their friends and family together (47%).

Joint leisure activities. At both waves, respondents were asked whether activities in their free time are done alone or with their partner, ranging from 1 "usually without partner" to 4 "usually with partner". Although the extent of participating jointly may depend upon the type of leisure activity, no such distinctions were made in the questionnaire. There was only one question that explicitly referred to "a day out, spending time on hobbies or associations". Observations are more or less evenly distributed across these categories (each containing about 25%).

Measures of the independent and control variables

Of central interest are legal and symbolic commitments, which are represented by different types of partnerships. These distinctions within the group of cohabiters and married couples were described in detail previously.

Legal commitment. Respondents were asked about their legal arrangements at both waves. On the basis of this information, we distinguish 4 groups to represent increasing levels along a continuum of legal commitment: (1) cohabiters without a contract, (2) cohabiters with a formal contract (a cohabitation contract or registered partnership), (3) married with a prenuptial agreement, and (4) married with joint property. As described previously, in the Netherlands, there is a distinction between registered partnerships and cohabitation contracts. Although by default registered partnerships offer greater protection against the risks of

specialization, we do not distinguish between registered partnerships and cohabitation contracts. Our data showed that respondents lack knowledge about the differences between these two arrangements. In fact, 1 in 10 said yes to both the question of whether they had a cohabitation contract and the one about registered partnership, which is legally impossible.

Symbolic commitment. Cohabiting respondents were asked about their marriage intentions (no, yes, do not know) and married respondents about premarital cohabitation at both waves. As outlined in detail previously, we distinguish between the following groups, indicating increasing levels of symbolic commitment: (1) Cohabiters without marriage intentions or unsure plans, (2) cohabiters with marriage intentions, (3) married after a period of cohabitation, and (4) directly married. Note that we only have information about marriage intentions as reported by the respondent. There is a positive association between legal and symbolic commitment among married couples as joint property is more likely among those who directly married. Among cohabiting couples, the association is negative. Having a contract goes hand-in-hand with not having marriage intentions.

In the analyses we control for characteristics known to be associated with both the extent of joint investments and whether people are married or cohabiting. It is likely that these characteristics are also related to the extent of legal and symbolic commitment.

Union duration. The duration of the union since the couple started living together (be it married or (still) unmarried) is measured as a dummy, coded 1 if the union has lasted for more than 5 years. This variable is updated in wave 2. Joint investments increase as unions last longer and cohabiting unions are generally of shorter duration than marriages. Since preliminary analyses revealed a curvilinear relationship between duration and most of our dependent variables, and we therefore control for duration squared as well.

Age. The age of the female partner is controlled for as younger cohorts are less likely to jointly invest and more likely to cohabit than older ones due to women's emancipation and processes of individualization. Because of a high correlation between the ages of partners (r=0.93), we only include the age of the woman. Rather than including age, we use dummies indicating whether the woman was born between 1950 and 1970 or born after 1970 (versus born before 1950). We use dummies because of the high correlation with union duration (r=0.87).

Partners' educational levels. Both partners were asked about their highest level of attained education at wave 1, ranging from 1 "less than primary school" to 10 "post-academic". We recoded these educational levels to formally required years for this particular level, ranging from 6 to 19 years. The correlation between the education of the partners is

moderate (r=0.46) and we therefore include the educational attainment of both in the analyses. Education is controlled for because a higher education is associated with less joint investments and, at least until recently in the Netherlands (see Manting, 1996), a greater likelihood of cohabitation.

Presence and age of children. We control for whether a couple has children living at home (1 if yes) and the age of the youngest child living at home. If no children lived at home, the average was assigned to the latter variable. This means that the dummy for the presence of children reflects the difference between couples with no children at home and couples with children of an average age, whereas the effect of age of the youngest child pertains to couples with children only. This information is updated from wave 1 to wave 2. Having children, particularly young ones, usually means greater joint investments as well as a greater chance of being married.

Progressive work and family attitudes. Both the primary respondent and their partner were asked a range of items about their attitudes towards work and family at wave 1 (9 items in total). These items constituted a reliable scale (Cronbach's alpha wave 1= 0.81 for men and 0.82 for women) and were averaged into a single scale, with high scores meaning liberal attitudes. Examples of items were "A man and a women are allowed to cohabit", "A women should stop working if she has children", and "It is more important for boys than girls to be able to earn their own income in the future". Partners' attitudes were moderately correlated (r=0.57), and both are included in the analyses. Conservative attitudes are associated with greater joint investments and a higher chance of marriage. The same holds for our next control, religiosity.

Religiosity. Religiosity is measured by the frequency of attending religious services (or other places of worship), ranging from 1 "(almost) never" to 4 "one or several times a week". Both partners were asked these questions at wave 1, but we only included religiosity of the female partner because of a high correlation between partners' religiosity (r=0.82).

Previous marriages. Both partners were asked whether they had been married before (coded 1 if yes). Second unions may be characterized by fewer joint investments and cohabitation is more likely in the case where people were married before.

Hours paid/unpaid labor. We control for the extent of specialization in unpaid labor when analyzing specialization in paid labor and vice versa. Both the New Home Economics and the time availability perspective (Shelton & John, 1996) suggest that these two forms of specialization are related and cohabiters are less likely to pursue either form of specialization.

Home ownership and self-employment. Because legal arrangements are often made due to practical reasons (Giessen, 1999), we control for two such major reasons: home ownership and self-employment. When buying a house, cohabiting partners often formalize their relationship due to the needs of the contract and other requirements such as those from the bank or mortgage. Self-employment is an important reason for people to marry with prenuptial agreements so that any debts from the business are not joint debts. A dummy indicates if either partner owns the house and another dummy indicates if either partner is self-employed (i.e., work for one's own account, self-employment or own company). This information is available at both waves.

RESULTS

As a first step, Table 1 shows differences between the distinguished legal and symbolic partnerships with respect to social-demographic and socioeconomic characteristics. These figures offer insight into the selectivity of those who choose a certain level of legal or symbolic commitment. Although not shown in the table for reasons of readability, most differences are significant and we only discuss the significant ones.

Overall, married couples are found to be older than cohabiting couples, which partly reflects the increased popularity of cohabitation over time. In line with prior Dutch research (e.g, Manting, 1994; 1996), we find that cohabiters have a higher education, have more progressive attitudes, are less religious and are more often previously married than married couples. Given the older age of married couples, it is no surprise that their unions are of longer duration, that they more often have children and are more often home-owners.

[Here table 1]

When a distinction is made with respect to legal arrangements, we see marked differences within the married and cohabiting groups. Cohabiters with a contract are older, higher educated and more progressive in their work-family attitudes than cohabiters without a contract, suggesting that the choice for a contract is selectively related to these characteristics. Moreover, the former group of cohabiters has been together for a longer period and they more often have children, which suggests that this type of cohabitation is a more permanent arrangement. Practical reasons also drive the choice for a contract: home ownership goes hand-in-hand with a contract, and self-employment is more common among cohabiters who

have no legal joint property (i.e, no contract). Differences are also found within the married group. Married couples with prenuptial agreements are younger, higher educated, more progressive, less religious, and more often previously married than those who chose the default option of joint property. Their unions are of shorter durations and they more often have children at home, as married couples with common property are more likely to be empty nesters given their older age. As expected, prenuptial arrangements are associated with greater self-employment and home ownership.

Marked differences are also observed when looking at presumed levels of symbolic commitment. Cohabiters with no intentions are generally older than cohabiters with marriage intentions, more progressive, less religious, and more often have been previously married. Furthermore, their unions have also lasted longer, more often have children or own a house than cohabiters with marriage intentions, suggesting that cohabiters with no intentions are a relatively stable group. Within the married group, the observed differences mirror the overall differences between marriage and cohabitation: spouses who previously cohabited are younger, higher educated, less progressive, and group who directly married are older, less educated, more progressive, less religious and more often have been married before than those married directly. In addition, direct marriage is associated with longer union durations, having no longer children living at home, and less home ownership and self-employment.

Table 2 shows changes in legal commitment (upper panel) and symbolic commitment (lower panel) from the first to the second wave. These figures give further insight into the permanence of different union types. Turning to legal commitment, we first observe from the marginal distributions that marriage in common property is the most common arrangement at both waves (about two thirds), followed by marriage with prenuptial agreements (about 17 to 18%). The two types of cohabitation are least common, and about evenly distributed in wave 1 (both about 9%). In wave 2, cohabiters with a contract are about twice (about 8%) as common than cohabiters without one (about 4%), suggesting that formalized cohabitation is a more stable arrangement. When tracking changes from wave 1 to wave 2, we see that the majority of cohabiters who had a contract at wave 1 still have a cohabiting contract at wave 2 (57%), followed by getting married (15%). The group of cohabiters without a contract is far less stable (30% shows no change) and more likely to break up as well as getting married or change the legal status of their cohabitation than cohabiters with a contract. A remarkable fact is that none of these destination states at wave 2 stands out as the most popular among this group of cohabiters. Married couples in general are characterized by less change than cohabiters (73 and 80% show no change): apart from less panel outfall, married couples are

less likely to break up and less likely to change their contract. If they do, the most common change is from prenuptial agreements to joint property rather than vice versa (10 versus 2%).

[Here Table 2]

The lower panel shows that direct marriage is only slightly more common than marriage after cohabitation, with percentages around 40 to 45%. Note however that our sample contains relatively many older cohorts born before 1970, a time after which cohabitation became increasingly popular (Liefbroer & Dykstra, 2000). Among younger cohorts, cohabitation followed by marriage is the most common path (ibid). Cohabiters are found to be as likely to have marriage intentions as to have no plans in wave 1 (both groups around 9%). In wave 2, however, the latter group is more common, because cohabiters without any intentions are less likely to change their plans. The majority (55%) still cohabits at wave 2 without any plans. In contrast, cohabiters who had marriage intentions in wave 1 are most likely to be either married in wave 2 or to still have marriage intentions, with both options being equally likely (both about 31%). Furthermore, cohabiters without intentions are no more likely to break up than those with plans (about 8-9%). Although the number of cases is too small to draw confident conclusions, it seems that having no marriage plans does not necessarily mean a lack of commitment to the relationship. Rather, it may signal a rejection of marriage given the persistence of no intentions among this group. The percentages of break up are more than twice as low among married couples, particularly among the directly married group. By definition, the married groups cannot change the extent of symbolic commitment over time. Overall, the above findings suggest different legal and symbolic states to be selective as to partners' social-demographic and socioeconomic characteristics, for which we will control. Moreover, the stability and permanence of legal cohabitation and no marriage plans, suggests that their meaning is qualitatively different from other forms of cohabitation.

[Here Table 3]

Before turning to the question of whether the level of joint investments depends upon the extent of legal and symbolic commitment, we first address whether married couples in general invest more. Bivariate analyses (not shown) confirm previous research in that married couples are more likely to specialize in paid and unpaid labor and to share their friends and family than cohabiters. For joint leisure, no differences are found, but this is attributed to the

fact that married couples more often have children at home which prevents them from engaging in joint activities. As soon as controls are added, married couples are found to participate more often in joint leisure activities than cohabiting couples (see Table 3). Also, once selectivity on measured characteristics is taken into account, the differences in specialization in unpaid labor and having shared friends and family persist. Married couples are however no longer found to specialize more in paid labor, after such selectivity is controlled. Because of space limitations, we will not describe the effects of the controls here, but they conform with prior research (see for example Brines & Joyner, 1999; Kalmijn & Bernasco, 2001; South & Spitze, 1994).

Could these observed differences between marriage and cohabitation arise from the different legal and symbolic meaning of marriage? Table 4 shows the association between legal commitment and joint investments. Note that all dependent variables are coded in the direction of greater joint investments (i.e., greater economic specialization, shared social lives). Legal aspects are expected to be particularly important for the extent of economic joint investments and we anticipated that specialization in paid and unpaid labor would increase with rising levels of legal commitment. The results are contrary to our hypothesis. The direction of the effects goes against the expected effects in terms of rising levels of legal commitment. Most notably, instead of cohabiters without any legal contract being the least likely to specialize, cohabiters with a contract are the ones least likely to specialize in paid labor. Contractual cohabiters clearly stand out as they differ significantly from all other legal union types. Rather than allowing for specialization, the choice for a cohabitation contract may well be a function of protecting ones' own resources and income in the event of a breakup.

Also specialization in unpaid work shows little of the expected association with legal commitment. Although the effects are mostly in the expected direction, we only find significant differences between the extremes, that is with non-contractual cohabiters having the least specialization and married with prenuptial agreements being the most specialized. The biggest differences are however between the two types of cohabiters and the two types of marriage, regardless of their legal status. Although we did not expect legal commitment to be related to social investments, the effects of legal commitment on the extent of joint family and friends, surprisingly, are conform our hypothesis for economic investments: the extent of shared social contacts increases with our presumed increased levels of commitment. Except for the two groups of cohabiters, all other union types differ significantly from each other. For the other type of social investments, joint leisure time, the pattern is again inconsistent, which

is no surprise, as we would expect to find little systematic association between legal commitment and joint leisure. Here, couples married in joint property clearly stand out as the ones participating jointly in leisure activities.

[Here Table 4 and 5]

The results for symbolic commitment are presented in Table 5. The estimates for specialization in paid labor for a large part support our hypothesis that joint investments increase as symbolic commitment increases. Although married couples who cohabited first do not significantly differ from cohabiters with marriage intentions, cohabiters with no intentions and directly married couples differ significantly from each other with the former being the least specialized and the latter employing the most traditional division of labor. The directly married couples also differ from most other union types and despite the relatively few cases, the difference between cohabiters with and without marriage plans borders on significance ($p=0.054$). The assumed least and most symbolically committed types of relationships are thus, as expected, also the ones who adopt the least and most specialized division of paid work, and they differ in that respect from the others.

A similar pattern is observed for specialization in unpaid work. The effects are in the expected order, showing an increase in specialization with increased levels of symbolic commitment. However, it is direct marriage that stands out as distinct from all other types of partnerships, which do not significantly differ from each other. Directly married couples employ the most traditional division of household labor, much more than cohabiters or former cohabiters. The strongest patterns are found for shared friends and family. In line with our hypothesis, the extent to which partners share their friends and family increases with rising levels of symbolic commitment. Cohabiters with marriage plans do not significantly differ from couples who cohabited prior to marriage, but cohabiters with no plans and directly married couples stand out again as having least and most shared contacts, respectively, compared to the other union types and each other. The least support for our hypotheses is found for joint leisure activities, although most effects are in the expected direction. Only cohabiters without any intentions to marry differ from all other union types, and are, as expected, least likely to engage in shared leisure activities.

CONCLUSIONS AND DISCUSSION

Numerous studies have shown differences between cohabiters and married couples in the extent to which partners invest in the relationship and the stability of their relationships (see reviews by Smock, 2000; Seltzer, 2000). To explain these differences, the debate has centered on the question of whether these differences are due to selection or whether marriage is truly a distinct type of relationship. Marriage is then thought of to be legally and symbolically different as it entails a legally enforceable contract and signals a long-term horizon. In this study, we tried to gain more insight into these presumed 'real' differences between marriage and cohabitation by constructing a continuum of legal and symbolic commitment. The Dutch context is ideal in that it introduced varying legal arrangements for cohabiters as early as the 1970s. We argued that commitment levels vary not only between cohabiters and those who marry, but also within these groups. If legal and symbolic aspects differentiate marriage from cohabitation, we would expect to see such differences reflected in an increase in economic and social joint investments with increasing levels of commitment on our more continuous categorization. Although not our main focus, we employed a longitudinal design allowing us to better control for unobserved selectivity than cross-sectional designs.

Our results lent little support for the role of legal aspects as the findings were inconsistent and often against expectations. In fact, where we expected to find the strongest effects, that is, economic investments, the results are contrary to the idea that legal arrangements protecting against the risk of economic specialization are associated with greater specialization: it is not cohabiters without a contract who are least likely to adopt a traditional division of paid work, but cohabiters with a contract. This group was also remarkably stable over time. Perhaps contractual cohabiters take the effort to draw up a contract precisely to protect their own incomes and avoid any problems related to the division of property and economic resources in the event of a break-up. Given our findings, we strongly doubt that it is the legal contract that distinguishes marriage from cohabitation

More support is found for the role of symbolic aspects. Joint investments, both economic and social, increase as presumed levels of symbolic commitment increase. The most consistent pattern is that cohabiters without marriage plans invest the least, followed by cohabiters with marriage plans and couples who married after cohabitation, with directly married couples investing the most. These findings suggest that marriage as a sign of commitment and permanence is the most plausible explanation for why married couples invest more often in their relationships than cohabiters. We would like to qualify this conclusion, however, in two respects.

First, we would not go as far as to say that the public vow of permanence that marriage implies (see Cherlin, 2000; Waite & Gallagher, 2000) actually changes people's behavior. If so, cohabiters with marriage intentions should make fewer investments than couples who already married after they cohabited. We found, however, that cohabiters who have marriage plans are as likely as their already married counterparts to specialize and jointly invest in their social networks. These findings resemble previous American findings which show that the relationship quality of married couples is as equal to cohabiters with marriage intentions (Brown & Booth, 1996; Brown, 2000). The public vow of marriage seems to be a confirmation of the partners' commitment towards each other rather than a function of it fostering commitment. Furthermore, in its most extreme version, the idea about marriage changing people, would suggest that former cohabiters who got married are similar to directly married couples. Our findings suggest otherwise as spouses who did not cohabit prior to marriage often invest more than those who cohabited before. This echoes findings from the majority of research (e.g., Bumpass & Sweet, 1989; De Maris & Rao, 1992; Manting, 1994; Thomson & Colella, 1992) but is contrary to for example the findings by Nock (1995) and Skinner et al. (2002), which show little differences on many aspects of the relationship. In our study, two relationship types stand out when it comes to joint economic and social investments: those who directly got married and couples without any marriage intentions. Our examination of the characteristics of these two union types in particular brings us to our next qualification.

Second, the assumption that our symbolic continuum represents increased levels of partners' long-term horizons may be invalid, at least for the union types at the extremes of the continuum. We have little doubt that cohabiters with marriage plans, who are also the ones most likely to marry and currently constitute the largest group in the Netherlands (Liefbroer & Dykstra, 2000), are likely to attach symbolic value to marriage, and will affirm their relationship by getting married. However, the stability in the plans of cohabiters without marriage intentions across waves, combined with their relatively progressive attitudes, suggest that this may not be true for them. Rather, they seem to be as committed to their partner as those with marriage plans, but seem to view cohabitation as an alternative to marriage. They may reject the institution of marriage and a traditional lifestyle in general, leading to fewer joint investments. Similarly, the ones who directly married predominantly grew up in a time when cohabitation may simply not have been an option, just as a separate and individualized couple relationship. It remains to be seen what the meaning of marriage is for younger generations who directly marry. As argued by Dourleijn and Liefbroer (2006),

this group may become more and more selective as to their traditional outlook on couple relationships for whom cohabitation is also no serious option. An alternative explanation for the greater investments of directly married couples compared to those marrying after cohabitation, may be that former cohabiters learned to be less committed and these learned habits cannot be compensated for by getting married (Kamp Dush, Cohan & Amato, 2003; Skinner et al., 2002).

Related to the former point, our categorization of symbolic and legal commitment implicitly assumes that couples have the agency and rationality to actively commit to their desired type of relationship. We acknowledge, however, that cohabitation may not only represent a lack of commitment, but postponement or forgoing of marriage due to economic uncertainty and socio-economic status (Edin & Reed, 2005; Gibson-Davis, Edin McLanahan, 2005; Manning & Smock, 1995; Mills, Blossfeld & Klijzing, 2005). Conversely, the hastening of cohabitation or marriage as a practical response to a pregnancy or plans to conceive a child in order to legitimate a birth and establish paternity has also been demonstrated in previous research (Blossfeld & Mills, 2001; Reed, 2006).

Our research showed that it is important to distinguish within the groups of cohabiting and married couples, thereby underscoring the point made by Seltzer (2004) that marriage and cohabitation may have different meanings for different subgroups. To unravel the complexities of the meaning of marriage and cohabitation and its nuances for different sub-groups, it would be ideal to actually track different groups from the start of their relationship and compare different partnership trajectories (e.g., Poortman & Lyngstad, 2007). We could not fully exploit our longitudinal dataset in this way, because of too few observations and because couples were not followed from the start onwards. Future research along these lines is all the more necessary as the relative numbers of different sub-groups of cohabiters and married couples (e.g., cohabiters with and without plans to marry) determine the meaning of cohabitation versus marriage in the population as a whole (Seltzer, 2004: 925). It would also be worthwhile to have both partners' reports about marriage plans. We had to rely on the report of one partner only when assessing the legal and symbolic status of their relationship. Particularly in case of marriage intentions, partners may have different plans and if so, our estimates for the effect of marriage intentions on joint investments are likely to be an underestimation. Finally, we encourage replications of our research in other countries as countries often differ in the meaning of marriage and cohabitation (Heuveline & Timberlake, 2004) and the degree of institutionalization of partnerships. For similar reasons (see Manting,

1996; Seltzer 2004), studies assessing changes over time are informative to enhance our understanding of marriage versus cohabitation and their future status.

Acknowledgement: 'The Netherlands Kinship Panel Study is funded by grant 480-10-009 from the Major Investments Fund of the Netherlands Organization for Scientific Research (NWO), and by the Netherlands Interdisciplinary Demographic Institute (NIDI), Utrecht University, the University of Amsterdam and Tilburg University.'

REFERENCES

Becker, G.S. (1981). *A treatise on the family*. Cambridge: Harvard University Press.

Bernasco, W. & Giesen, D. (1999). Het huwelijkscontract en de arbeidsmarktdeelname van de vrouw. Pp. 81-104 in Kalmijn, M., Bernasco,W. & Weesie, J. (Eds). *Huwelijks - en samenwoonrelaties in Nederland. De organisatie van afhankelijkheid*. Assen: Van Gorcum.

Bianchi, S. M., Milke, M.A., Sayer, L. C., & Robinson, J.P. (2000). Is anyone doing the housework? Trends in the gender division of household labor. *Social Forces*, 79, 191-228.

Blossfeld, H.-P. & Mills, M. (2001) "A Causal Approach to Interrelated Family Events: A Cross-National Comparison of Cohabitation, Nonmarital Conception, and Marriage," *Canadian Studies in Population*. 28(2): 409-437.

Boele-Woelki, K., Curry-Summer, I., Jansen, M. & Schrama, W. (2007). *Huwelijk of geregistreerd partnerschap? Evaluatie van de wet openstelling huwelijk en de wet geregistreerd partnerschap*. Deventer: Kluwer

Brines, J. & Joyner, K. (1999). The ties that bind: Principles of cohesion in cohabitation and marriage. American Sociological Review, 64, 333-355.

Brown, S. L. (2004). Moving from cohabitation to marriage: Effects on relationship quality. Social Science Research, 33, 1-19.

Brown, S., & Booth, A. (1996). Cohabitation versus marriage: A comparison of relationship quality. *Journal of Marriage and the Family*, 58, 668-678.

Bumpass, L., Sweet, J., & Cherlin, A. (1991). The role of cohabitation in declining rates of marriage. *Demography*, 53, 913-927.

Bumpass, L.L., & Lu, H. (2000). Trend in cohabitation and implications for children's family contexts in the United States. *Population Studies*, 54, 29-41.

Cherlin, A. J. (2000). Towards a new home socioeconomics of union formation. Pp. 126-146 in L.J. Waite, C. Bachrach, M. Hindin, E. Thomson, & A. Thornton (Eds), *The ties that bind. Perspectives on cohabitation and marriage*. New York: Aldine de Gruyter.

Ciabattari, T. (2004). Cohabitation and Housework: The Effects of Martial Intentions, *Journal of Marriage and the Family*, 66, 118-125.

DeMaris, A. & Rao, K.V. (1992). Premarital cohabitation and subsequent marital stability in the United States: A Reassessment. *Journal of Marriage and the Family,* 54, 399-407.

Dykstra, P.A., Kalmijn, M. Knijn, T. C.M. , Komter, A E., Liefbroer, A.C., & Mulder, C.H. (2007). Codebook of the Netherlands Kinship Panel Study, a multi-actor, multi-method panel study on solidarity in family relationships, Wave 2. *NKPS Working Paper No. 6.* The Hague: Netherlands Interdisciplinary Demographic Institute.

Dykstra, P.A., Kalmijn, M. Knijn, T.C.M., Komter, A.E., Liefbroer, A.C. & Mulder, C.H. (2005). Codebook of the Netherlands Kinship Panel Study, a multi-actor, multi-method panel study on solidarity in family relationships, Wave 1. *NKPS Working Paper No. 4*. The Hague: Netherlands Interdisciplinary Demographic Institute.

Edin, K. & Reed, J.M. (2005). 'Why Don't They Just Get Married? Barriers to Marriage among the Disadvantaged,' *Future of Children*, 15(2): p117-137.

Eggebeen, D.J. (2005). Cohabitation and exchanges of support. *Social Forces*, 83, 1097-1110.

Gibson-Davis, C.M., Edin, K. & McLanahan, S. (2005). 'High Hopes but Even Higher Expectations: The Retreat From Marriage Among Low-Income Couples,' *Journal of Marriage and Family* 67(5): 1301–1312.

Giesen, D. (1999). Juridische arrangementen. Pp. 55-80 in Kalmijn, M., Bernasco,W. & Weesie, J. (Eds). *Huwelijks - en samenwoonrelaties in Nederland. De organisatie van*

afhankelijkheid. Assen: Van Gorcum.
Heimdal, K.R. & Houseknecht, S.K. (2003). Cohabiting and married couples' income organization: Approaches in Sweden and the United States. *Journal of Marriage and Family*, 65, 525–538.
Heuveline, P. & Timberlake, J.M. (2004). The role of cohabitation in family formation: the United States in comparative perspective. *Journal of Marriage and Family* 66, 1214-1230.
Hochschild, A.R. (with Machung, A.) (1989). *The second shift: Working parents and the revolution in the home*. New York: Viking Press.
Hogerbrugge, M. & Dykstra, P.A. (2007).The family ties of unmarried cohabiting and married persons. Paper presented at Nederlandse Demografiedag 2007. Utrecht, October, 9
Kalmijn, M. & Bernasco (2001). Joint and separated life styles in couple relationships. *Journal of Marriage and Family*, 63, 639-654.
Kalmijn, M. , Loeve, A. & Manting, D. (2007). Income dynamics in couples and the dissolution of marriage and cohabitation. *Demography*, 44, 159-179.
Kamp Dush, C.M., Cohan, C.L. & Amato, P.R. (2003). The relationship between cohabitation and marital quality and stability: Change across cohorts? *Journal of Marriage and Family*, 65, 539-549.
Liefbroer, A. C. & De Jong Gierveld, J. (1993). The impact of rational considerations and perceived opinions on young adults' union formation intentions. *Journal of Family Issues*, 14, 213-235.
Liefbroer, A.C. & Dourleijn, E. (2006).Unmarried cohabitation and union stability: testing the role of diffusion using data from 16 European countries. *Demography*, 43, 203-221.
Liefbroer, A.C. & Dykstra, P.A. (2000). *Levenslopen in verandering. Een studie naar ontwikkelingen in de levenslopen van Nederlanders geboren tussen 1900 en 1970*. Den Haag: Sdu Uitgevers.
Lillard, L.A., Brien, M.J. and Waite, L.J., 1995. 'Premarital cohabitation and subsequent marital dissolution: A matter of self-selection?' *Demography* 32, 437-457.
Manning, W.D. & Smock, P.J. (1995) 'Why Marry? Transitions to Marriage Among Cohabitors,' *Demography*, 32: 509-520.
Manting, D. (1994). *Dynamics in marriage and cohabitation: An inter-temporal, life course analysis of first union formation and dissolution*. Amsterdam: Thesis Publishers.
Manting, D. (1996). The changing meaning of cohabitation and marriage*. European Sociological Review*, 12, 53-65.
Mills, M. (2004). Stability and Change: The Structuration of Partnership Histories in Canada, the Netherlands and the Russian Federation. *European Journal of Population*, 20, 141-175.
Mills, M., Blossfeld, H.-P. & Klijzing, E. (2005) "Becoming an Adult in Uncertain Times: A 14-Country Comparison of the Losers of Globalization," pp. 393-411, In: H.-P. Blossfeld, E. Klijzing, M. Mills and K. Kurz (Eds.) *Globalization, Uncertainty and Youth in Society*. London/New York: Routledge Advances in Sociology Series.
Nock, S.L. (1995). A comparison of marriages and cohabiting relationships. *Journal of Family Issues,* 16, 53-76
Poortman, A. & Liefbroer, A.C. (2005). Willing to commit? Singles' relational preferences from a life course perspective. Paper presented at the Nederlandse Demografiedag 2005, Utrecht, the Netherlands, October 6.
Poortman, A. & Lyngstad, T. H. (2007). Dissolution Risks in First and Higher Order Marital and Cohabiting Unions. *Social Science Research*, 36, 1431-1446.

Reed, J.M. (2006). 'Not Crossing the 'Extra Line': How Cohabitors With Children View Their Unions,' *Journal of Marriage and the Family*, 68: 1117-1131.
Schoen, R. (1992). First unions and the stability of first marriages. *Journal of Marriage and the Family*, 54, 281-284.
Seltzer, J.A. (2000). Families formed outside of marriage. *Journal of Marriage and Family*, 62, 1247-1268.
Seltzer, J.A. (2004). Cohabitation in the United States and Britain: Demography, Kinship and the future. *Journal of Marriage and Family*, 66, 921-928.
Shelton, B.A., & John, D. (1996). The division of household labor. *Annual Review of Sociology*, 26, 1-20.
Skinner, K.B., Bahr, S.J., Crane, D. R , & Call,. V.R. (2002). Cohabitation, marriage and remarriage. A comparison of relationship quality over time. *Journal of Family Issues,* 23, 74-90.
Smock, P.J. & Manning, W.D. (2004). Living together unmarried in the United States: Demographic perspectives and implications for family policy. *Law & Policy*, 26, 1, 87-117.
Smock, P.J. (2000). Cohabitation in the United States. An appraisal of research themes, findings and implications. *Annual Review of Sociology*, 26, 1-20.
Snijders, T.A.B. & Bosker, R.J. (1999). *Multilevel analysis*. London: Sage
South, S.J. & Spitze, G. (1994). Housework in martial and nonmarital households. *American Sociological Review*, 59, 327-347.
Steele, F., Sigle-Rushton, W. & Kravdal, O. (2007). Consequences of family disruption on children's educational outcomes in Norway. Paper presented at the The Fifth Meeting of the European Network for the Sociological and Demographic Study of Divorce, London, Great Britain, September 17-18
Thomson, E. & Colella, U. Cohabitation and Marital Stability: Quality or Commitment? *Journal of Marriage and the Family* 54 , 259-267.
Waaldijk, Mr. C. (2000). Partnerschapsregistratie en huwelijk: toenemende rechtsgelijkheid voor geslachtsgelijke partners en hun kinderen. Pp. 121-183 in Lenters, H., Reinhartz, B.E., Waarldijk, C. De Groot, G.R., Laboijm, A.N., & Stille, A.L.G.A. (eds). *De familie geregeld?* Den Haag: Koninklijke vermande.
Waite, L.J. & Gallagher, M. (2000). *The case for marriage. Why married people are happier, healthier, and better off financially*. New York: Broadway books.

Figure 1. The legal and symbolic continuum of commitment

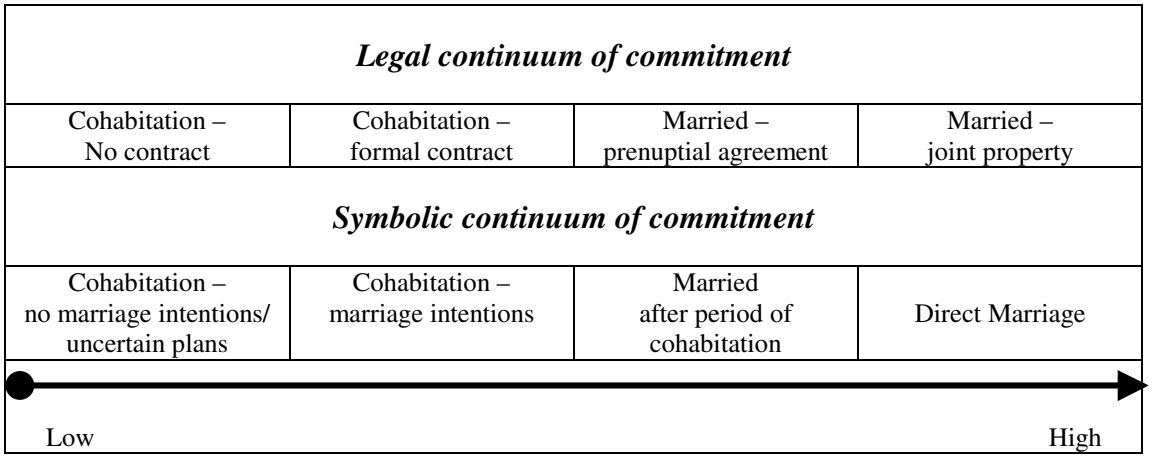

Table 1. Means and Standard Deviation (in parentheses) of the control variables by legal and symbolic commitment

	Legal Committment				Symbolic Committment			
	Cohabiting		Married		Cohabiting		Married	
	No contract	Contract	Prenupt. agreements	Joint property	No plans	Plans	After cohab.	Direct
Partners' characteristics								
Birthcohort < 1950	.03	.05	.13	.24	.06	.01	.05	.36
Birthcohort 50-70	.36	.51	.66	.61	.59	.27	.69	.56
Birthcohort >70	.61	.45	.22	.15	.35	.72	.26	.08
Man education	12.67	13.22	13.56	12.46	12.81	13.18	13.19	12.24
	(2.71)	(2.67)	(3.04)	(3.01)	(2.83)	(2.53)	(2.89)	(3.12
Woman education	12.99	13.48	13.00	11.81	13.18	13.37	12.87	11.35
	(2.42)	(2.49)	(2.71)	(2.70)	(2.63)	(2.26)	(2.57)	(2.69)
Men work-family attitudes	4.08	4.23	3.99	3.88	4.20	4.12	4.11	3.72
	(.52)	(.48)	(.58)	(.63)	(.52)	(.48)	(.53)	(.64)
Woman work-family attitudes	4.35	4.41	4.19	4.06	4.41	4.35	4.29	3.90
	(.46)	(.41)	(.55)	(.60)	(.43)	(.43)	(.49)	(.62)
Woman church frequency	1.37	1.31	1.68	1.88	1.27	1.41	1.47	2.16
	(.62)	(.55)	(.88)	(1.03)	(.53)	(.64)	(.69)	(1.12)
Man prior marriage	.19	.18	.12	.06	.23	.13	.12	.03
Woman prior marriage	.19	.16	.08	.06	.23	.10	.10	.03
Couple characteristics								
Duration	5.57	9.86	17.07	22.50	10.25	5.31	15.68	26.42
	(5.32)	(7.06)	(9.44)	(10.67)	(7.39)	(4.53)	(7.79)	(10.31)
Children present	.32	.43	.73	.63	.45	.30	.79	.52
Age youngest child	8.15	7.41	8.13	9.89	7.79	7.66	7.55	11.28
	(3.62)	(4.00)	(5.31)	(5.82	(4.13)	(3.52)	(4.94)	(5.87)
Other								
Owned house	.50	.87	.92	.85	.75	.66	.88	.85
Either partner self-employed	.20	.11	.33	.13	.15	.16	.18	.16
N of person-periods	376	480	980	3701	462	394	2204	2477

Source: NKPS, wave 1 and wave 2, authors' calculations.
Note: Wave 1 and 2 combined

Table 2. Change and stability in legal and symbolic commitment from wave 1 to wave 2, numbers and percentages (row percentages in parentheses)

Legal commitment

Wave 1	Wave 2 Not in wave 2	Break up	Cohab, no contract	Cohab, contract	Married, prenupt	Married joint	Total N w1	%
Cohab no contract	59 (20.3)	34 (11.7)	87 (30.0)	43 (14.8)	20 (6.9)	47 (16.2)	290	9.3
Cohab contract	52 (18.4)	16 (5.7)	9 (3.2)	162 (57.5)	12 (4.3)	31 (11.0)	282	9.00
Married prenupt	74 (14.0)	14 (2.7)	--	--	388 (73.4)	53 (10.0)	529	16.9
Married joint	302 (14.9)	55 (2.7)	--	--	49 (2.4)	1,627 (80.0)	2033	64.9
Total N w2	487	119	96	205	469	1,758	3134	100%
%	15.5	3.8	3.1	6.5	15.0	56.1	100%	
% sub	excluded	excluded	3.8	8.1	18.6	69.5	100%	

Symbolic commitment

Wave 1	Wave 2 Not in wave 2	Break up	Cohab no marriage intentions	Cohab marriage intentions	Married after cohab	Married directly	Total N w1	%
Cohab no marriage intentions	50 (17.2)	28 (9.7)	158 (54.5)	32 (11.0)	22 (7.6)	--	290	9.3
Cohab marriage intentions	61 (21.6)	22 (7.8)	24 (8.5)	87 (30.9)	88 (31.2)	--	282	9.0
Married after cohabitation	158 (13.5)	42 (3.6)	--	--	975 (83.0)	--	1,175	37.5
Married directly	218 (15.7)	27 (2.0)	--	--	--	1,142 (82.3)	1,387	44.3
Total N w2	487	119	182	119	1,085	1,142	3134	100%
%	15.5	3.8	5.8	3.8	34.6	36.4	100%	
% sub	excluded	excluded	7.2	4.7	42.9	45.2	100%	

Source: NKPS, wave 1 and wave 2, authors' calculations.
Notes: w1=wave 1; w2=wave 2; Persons with missing data on the dependent variables (n= 125) in wave 2 are included.

Table 3. Differences in economic and social investments between married and cohabiting couples: random effect ordered logit models

	Paid labor	Unpaid labor	Joint family/friends	Joint leisure
Cohabiting (ref)				
Married	.120	.387*	.694**	.223*
Duration	.145**	.130**	.039~	-.020
Duration squared	-.004**	-.002**	-.000	.001~
Children present	.844**	.220	-.451**	-.235**
Age youngest child	-.030**	-.003	.004	-.000
Birthcohort 1950-70	-.410*	-.172	.030	.448**
Birthcohort >70	-.608*	-.140	.332	.651**
Man education	.057**	.049*	.028	-.003
Woman education	-.136**	-.184**	-.146**	-.032*
Man work-family attitudes	-.125	-.425**	-.180~	-.054
Woman work-family attitudes	-.630**	-.337*	.071	-.050
Woman church frequency	.114*	.112	.148**	-.060
Man prior marriage	.054	.012	-.186	.338*
Woman prior marriage	-.007	.071	.295	.444**
Owned house	-.280*	.608**	.174	-.043
Either partner self-employed	.349**	.616**	-.033	.060
Specialization unpaid labor	.611**			
Specialization paid labor		.661**		
Intercept 1	-4.990**	-3.955**	-2.748**	-2.044**
Intercept 2	-1.433*	.256**	.860	-.762~
Intercept 3				.843*
Number of person-periods	5537	5537	5537	5537
Number of persons	3134	3134	3134	3134

Source: NKPS, wave 1 and wave 2, authors' calculations.
Notes: ** Two-sided $p \leq 0.01$ * Two-sided $p \leq 0.05$ ~ Two-sided $p \leq 0.10$

Table 4. Differences in economic and social investments depending upon legal commitment: random effect ordered logit models

	Paid labor	Unpaid labor	Joint family/friends	Joint leisure
Cohabiting no contract	.000	.000	.000[b]	.000
Cohabiting contract	-.611[ac]	.179	.189[b]	-.256[b]
Married prenuptial agreement	-.194[c]	.597[a]	.564[abc]	-.078[b]
Married joint	-.277	.439	.918[abc]	.125[c]
Duration	.155**	.130**	.034	-.017
Duration squared	-.004**	-.002**	-.000	.001~
Children present	.847 **	.217	-.448**	-.231**
Age youngest child	-.032**	-.002	.004	-.002
Birthcohort 1950-70	-.414*	-.165	.018	.436**
Birthcohort >70	-.597*	-.127	.307	.636**
Man education	.055**	.048*	.031~	-.002
Woman education	-.136**	-.186**	-.143**	-.029~
Man work-family attitudes	-.118	-.431**	-.186~	-.054
Woman work-family attitudes	-.636**	-.333*	.074	-.052
Woman church frequency	.115*	.115	.139*	-.066~
Man prior marriage	.062	.001	-.174	.355**
Woman prior marriage	.002	.071	.292	.444**
Owned house	-.215	.577**	.166	-.008
Either partner self-employed	.316**	.590**	.030	.086
Specialization unpaid labor	.612**			
Specialization paid labor		.662**		
Number of person-periods	5,537	5,537	5,537	5,537
Number of persons	3,134	3,134	3,134	3,134

Source: NKPS, wave 1 and wave 2, authors' calculations.
Notes: ** Two-sided $p \leq 0.01$ * Two-sided $p \leq 0.05$ ~ Two-sided $p \leq 0.10$
[a] Contrast with cohabitation no contract significant (Two-sided $p \leq 0.05$)
[b] Contrast with married joint property significant (Two-sided $p \leq 0.05$)
[c] Contrast with cohabitation contract significant (Two-sided $p \leq 0.05$)

Table 5. Differences in economic and social investments depending upon symbolic commitment: random effect ordered logit models

	Paid labor	Unpaid labor	Joint family/friends	Joint leisure
Cohabiting no intentions	.000 [b]	.000[b]	.000[bc]	.000[c]
Cohabiting intentions	.422	.125[b]	.659[ab]	.238
Married after cohabitation	.213[b]	.357[b]	.906[ab]	.338[a]
Married directly	.676[ac]	.786[ac]	1.295[ac]	.268
Duration	.153**	.134**	.049*	-.017
Duration squared	-.004**	-.002**	-.000	.001~
Children present	.876**	.246~	-.417**	-.231**
Age youngest child	-.036**	-.007	-.002	-.001
Birthcohort 1950-70	-.397*	-.154	.044	.441**
Birthcohort >70	-.575*	-.075	.352	.626**
Man education	.058**	.052*	.028	-.004
Woman education	-.131**	-.180**	-.141**	-.032*
Man work-family attitudes	-.091	-.400**	-.147	-.058
Woman work-family attitudes	-.598**	-.301*	.096	-.055
Woman church frequency	.060	.066	.100~	-.054
Man prior marriage	.113	.049	-.121	.342*
Woman prior marriage	.082	.159	.395~	.450**
Owned house	-.271*	.620 **	.184	-.040
Either partner self-employed	.349**	.616**	-.037	.056
Specialization unpaid labor	.601**			
Specialization paid labor		.653**		
Number of person-periods	5,537	5,537	5,537	5,537
Number of persons	3,134	3,134	3,134	3,134

Source: NKPS, wave 1 and wave 2, authors' calculations.
Notes: ** Two-sided $p \leq 0.01$ * Two-sided $p \leq 0.05$ ~ Two-sided $p \leq 0.10$
[a] Contrast with cohabitation no intentions significant (Two-sided $p \leq 0.05$)
[b] Contrast with married directly significant (Two-sided $p \leq 0.05$)
[c] Contrast with married after cohabitation significant (Two-sided $p \leq 0.05$)