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Research Article

Gender and time allocation of cohabiting and married women and men in France, Italy, and the United States

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Abstract

BACKGROUND

Women, who generally do more unpaid and less paid work than men, have greater incentives to stay in marriages than cohabiting unions, which generally carry fewer legal protections for individuals that wish to dissolve their relationship. The extent to which cohabitation is institutionalized, however, is a matter of policy and varies substantially by country. The gender gap in paid and unpaid work between married and cohabiting individuals should be larger in countries where cohabitation is less institutionalized and where those in cohabiting relationships have relatively fewer legal protections should the relationship dissolve, yet few studies have explored this variation.

OBJECTIVE

Using time diary data from France, Italy, and the United States, we assess the time men and women devote to paid and unpaid work in cohabiting and married couples. These three countries provide a useful diversity in marital regimes for examining these expectations: France, where cohabitation is most “marriage like” and where partnerships can be registered and carry legal rights; the United States, where cohabitation is common but is short-lived and unstable and where legal protections vary across states; and Italy, where cohabitation is not common and where such unions are

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not legally acknowledged and less socially approved than in either France or the United States.

RESULTS

Cohabiting men's and women's time allocated to market and nonmarket work is generally more similar than married men and women. Our expectations about country differences are only partially borne out by the findings. Greater gender differences in the time allocated to market and nonmarket work are found in Italy relative to either France or the U.S.

1. Introduction

Cohabitation as a precursor or alternative to (first) marriage has increased dramatically in Europe and English-speaking countries outside Europe such as the United States, Canada, Australia, and New Zealand (Waite et al. 2000; Kiernan 2001; Nazio 2008). Cohabitation is also increasingly the partnership of choice in new relationships formed after divorce, slowing the rate of entry into remarriages in the United States and other countries. Despite the increase in cohabitation, we know little about how labor, particularly unpaid labor, varies among men and women across union types and across varying contexts (Davis and Greenstein 2004; Davis et al 2007).⁵ This paper compares and contrasts men's and women's time spent in market and nonmarket work in three distinct contexts where the degree of institutional support for marriage and cohabitation varies.

The rise in cohabitation as an alternative family form occurred much earlier and is much more common in Northern than in Southern Europe. Yet countries in the South, such as Spain and Italy, are now also experiencing an increase in cohabitation. There is greater acceptance of cohabitation as a "legitimate" or "normal" family form and cohabitation is less distinct from marriage in Scandinavia, the Netherlands, and in France than in countries like the United States and Italy. Cohabiting unions can be registered in France, for example, whereas they have no form of legal recognition in Italy. The United States is the most complex case study in that it has the most variance in legal rights for cohabiters. Benefits that accrue to partnered individuals are extended to cohabiters in some locations and situations but not in others, with no universal guarantee of rights (such as health care access) to cohabiting partners.

⁵ Batalova and Cohen's (2002) widely cited cross-national analysis of the gendered division of housework examines married couples and premarital cohabiters only.

Even in the countries where cohabitation is widespread, however, an individual's claim to benefits – such as a spouse's pension or the right to inherit property – is often stronger for those who are legally married.⁶ In many, if not all countries, marriage tends to confer more legal rights and obligations than cohabitation. This tends to create greater risk and uncertainty should the relationship disrupt for cohabiting than for married individuals. Legal institutions can directly or indirectly influence marriage behavior – e.g., directly through tax incentives that encourage (or discourage) marriage over cohabitation and indirectly by restricting benefits to married partners versus cohabiting partners (see Barg and Beblo 2010 for a discussion of institutional differences between cohabitation and marriage in Germany; Waaldijk 2003 and 2004 for a comparison of general legal nature of married and cohabiting relations; Bradley 2001 for a “legal tradition” account of differences between marriages and cohabitation in western European Union countries, and the special issue of the “International Journal of Law, Policy and the Family” (Oxford University 2001)). Under conditions where greater benefits and protections accrue to married partners, there may be incentives to marry, especially for the partner with less earning power.

There may also be greater incentives for partners, especially women, to invest in unpaid work in married than in cohabiting unions because married spouses are typically entitled to certain monetary benefits from their spouse in the event of union dissolution. When individuals invest in unpaid work for the family, it can allow for more efficiency, less redundancy, and greater ability to enhance well-being (particularly if the other partner invests in paid work), but there are also potential costs if the relationship should end. Although in theory both men and women may enjoy the greater protection offered by marriage and thus may have greater incentives to engage in unpaid work therein, it is typically women that reduce time in market work to spend more time in nonmarket housework and family care (Thiessen et al. 1994; Gershuny et al. 2005). If men's time allocation changes it is most often to increase market work to support the family economically (Lundberg and Rose 2000). Although the widespread movement of women into the paid labor force in Western nations in recent decades has resulted in greater equity among the time allocations of married couples, the gendered division of labor remains an enduring feature of modern family life (Baxter 2006; Bianchi 2011; Nazio and MacInnes 2007).

Gender differentiation in market and nonmarket work may be more likely in marriage than in cohabiting unions because laws often exist to protect the marital

⁶ For example, there has been significant media coverage of the dispute in Sweden between the family and the cohabiting partner of the successful Swedish novelist Steig Larsson, whose novels published posthumously have been a huge financial success. Larsson's partner has not shared in any of the estate because the couple did not have a legally recognized union and there was no will at the time of death.

partner who specializes in childrearing should the relationship end. Examples include a married partner's (usually a wife's) right to claim a portion of a former spouse's pension benefits in the U.S.⁷ or the right to remain in the family dwelling after marital disruption in Italy.⁸ In many states in the U.S. and in Europe, all marital property is "communal" property, divisible at the time of divorce. The same protections do not exist, or are more limited and variable across countries, for cohabiting unions. The combination of the lack of legal protection and the greater degree of uncertainty about the future duration of the relationship leads to the expectation that investing in unpaid work, particularly for women, within cohabiting unions is riskier than for marital unions. However, this difference in tendency to specialize by union type should vary by context, with greater differences between cohabiting and married individuals in contexts where cohabitation is less widespread and more distinct from marriage. Countries where marriages are less stable (i.e. those with higher divorce rates) may also be characterized by fewer differences between cohabiting and married individuals.

In this paper, we use data from time diaries to assess time allocation to market and nonmarket work for cohabiting versus married individuals in three distinct country contexts: France where cohabitation is widespread and treated much like marriage, Italy where cohabitation is still confined to specific groups of individuals and not a legally recognized family form, and the United States which fits somewhere between France and Italy. In the U.S., there has been a large increase in cohabitation with it now being the modal type of first union, but there is still resistance to cohabitation as an accepted family form (Powell et al. 2010; Seltzer, Strohm, Bianchi 2010; Thornton, Axinn, Xie 2007) and limited legal protection of rights and obligations of cohabiting partners.

We expect that cohabiting women will supply more time to market work than married women and that the "traditional" allocation of women's time to unpaid, nonmarket work in the home will be lower in cohabiting than in marital relationships, net of controls for demographic and socioeconomic differences between the two groups. Conversely, cohabiting men may do somewhat less market work relative to married men given that the pressures and incentives to be a provider are not as strong in cohabitation as they are in marriage. Still, there are high expectations for men, irrespective of union type, to be employed fulltime in all three contexts. We expect these differences by union type to be greater in Italy and the United States than in France.

As developed in the next section, our expectations of less gender differentiation in time devoted to work activities among cohabiting men and women rests on the

⁷ In the United States, those who divorce can claim Social Security and other pension benefits of the ex-spouse if the marriage has lasted for a period of time; e.g., for 10 years in the case of Social Security benefits.

⁸ In Italy, the right to occupy the family home is granted to the widow, and to a divorced spouse with the custody of the children (if any), de-facto generally the mother, sometimes even when the mortgage is still in the control of the former husband.

supposition that cohabitation provides fewer incentives to do unpaid work than marriage, especially for women. We also acknowledge, however, that those women who are inclined to invest large amounts of time in nonmarket work as well as men who desire partners who are willing to do large amounts of unpaid work may more quickly transition from cohabitation to marriage or avoid cohabitation altogether. This avoidance of or selection out of cohabitation may explain observed differences between those in the two union types. Cohabiting partners may be less committed to the current partner, on average, than those who are married. Those less sure of the long term viability of the relationship may choose to cohabit – and remain in the cohabiting state without transitioning to marriage for longer periods – than those who are more certain about the future of the relationship (Oppenheimer 2003). Those who are more committed to their partner may exit cohabitation and marry more quickly, or marry directly. Part of the motivation for the countries we compare is the expectation that all these arguments should apply in some contexts more than others. That is, incentives to exit cohabitation for marriage will apply less to France, where long term cohabitation is common and where legal recognition is possible. In contrast, there are more incentives to marry in the United States and particularly in Italy, where cohabitation is increasing but where there is far less societal acceptance and fewer institutionalized supports.

Although we use rich data on time allocation, the data are cross-sectional and thus we cannot address fully the selection issue. We review what is known about the selection mechanism in the next section. Our main contribution is to examine whether greater gender equality in men's and women's time spent in work activities emerges in contexts where the supports for marriage are greater relative to cohabitation. By choosing three very distinct countries we can assess whether the size of the cohabitation-marriage differential in market and nonmarket time allocation is associated with supports and stability for marriage.

The organization of the paper is as follows. In Section 2, we further develop expectations and review previous literature on variation in time use between men and women in cohabitation and marriage and on selection out of cohabiting and into marital unions. In Section 3, we briefly review the French, Italian, and U.S. contexts for marriage and cohabitation. In Section 4, we describe the French, Italian, and American time use data collections and lay out our analysis plan. In Section 5, we present results and in Section 6 we summarize our findings and draw conclusions.

2. Background

A number of previous studies suggest that there may be gender variation among cohabiting versus married couples (Batalova and Cohen 2002; Barg and Beblo 2010;

Cunningham 2005; Davis et al. 2007; Domínguez-Folgueras 2012; Gemici and Laufer 2009; Ginther et al. 2006; Stratton 2004, Nazio and Saraceno 2013). Stratton (2004) argues that all couples specialize but that specialization makes more sense the longer the time horizon. Uncertainty about the future longevity of the relationship creates a disincentive to specialize – or an incentive to specialize less – than if one is more certain that the relationship will last and that the benefits of specialization will be realized and the costs reduced. She analyzes the 1992-94 (second wave) of the National Survey of Families and Households (NSFH) to show that there is more specialization in housework among married than cohabiting couples. Her index of specialization, derived from husbands' (or wives') reports about how much time each member of a couple spends in nine housework tasks, is positively associated with marriage and the association with the specialization index is reduced in size when the duration of the current relationship is taken into account. She interprets the small positive association between duration of the relationship and the specialization index as evidence of her theory about uncertainty. The longer the relationship has lasted, the more secure couples have become in a more specialized division of labor in the home. She also finds that having children and owning a home are positively correlated with the degree of spending time in housework.

Barg and Beblo (2010) analyze the German Socioeconomic Panel (GSEOP) where employed married men average four more hours of market work per week than their employed wives compared with a gap half that size for cohabiting couples. Married women are more likely than cohabiting women to not be employed and married women are also less likely than cohabiting women to be employed full time. Married men do less childcare and housework than their spouses but also less than cohabiting men.

They argue that there is both economic and sociological theory to lead one to predict these findings of more gender similarity in paid and unpaid work in cohabiting than married households. The economic theory of “gains from trade” (Becker 1985) argues that it is efficient to specialize, with the person who is more skilled in one type of work concentrating in that type of work. There is no inherent reason why women would need to be the one focused on nonmarket work except that their earnings potential tends to be lower than men's in virtually all contexts. Although Becker's theory acknowledges that there are market and nonmarket forces that result in a greater earning potential for men, the theory does not deal with the (gendered) differentials in potential loss arising from the specialization in case of union dissolution (Oppenheimer 1997).

Barg and Belbo (2010) note that there may be family gender role norms that push married women to do more of the nonmarket work than married men and that married men do more of the market work. They argue that cohabiters should be less susceptible to these “family role” norms, which govern marriage far more so than the less

institutionalized union type of cohabitation. They also point out that legal and institutional treatments influence gendered patterns of time use and tend to be far more supportive of such patterns in married than in cohabiting couples in Germany. Thus, cohabiters should be more likely to divide labor based on productivity or efficiency, and cohabiting men and women may look more similar than married individuals.

Empirically, they use propensity score matching techniques to try to assess what they call “selection into specialization” – i.e., the higher marriage probability of cohabiters who have or want a specialized division of labor. They focus on intra-couple time use differences in three domains – employment, childcare, and housework – using stylized questions rather than time diary data, which is not available in the GSEOP. Given that housework is measured in hours, the precision of their results might be questioned, especially for men who usually contribute less than one hour to the household chores. They find that the “selection” argument completely explains the differences in specialization in housework between married and cohabiting couples (with married couples engaged in a more gender specialized division of labor). Selection explains a significant share of the differences in employment and childcare but the time allocation of married couples remains more gender differentiated than for cohabiting couples even after “matching” couples to control for selection.

Barg and Belbo’s (2010) findings suggest that childcare may be distinct from housework, with selection mechanisms not fully explaining marriage-cohabitation differences in childcare. In married couples, time allocation to childcare becomes more gender differentiated and remains so over time. But in cohabiting couples who do not marry, the initial gender specialization in childcare that occurs right after a birth tends to return to less gender-differentiated behavior over time. Ono and Yielding (2009) also examine differences in allocation of time to childcare between married and cohabiting women and men in Sweden and the United States. Their analysis is cross-sectional but suggests that context matters. Cohabiting men with children allocate significantly less time to childcare than married men, but only in the United States, not in Sweden. Ono and Yielding’s (2009) findings about childcare suggest that differences are greater in contexts where cohabitation is less widespread and less “marriage-like”. In some contexts more so than others, cohabiters may be a self-selected group with distinctive interest in breaking the traditional expectations around the household division of labor.

Past research leads to the following expectations. First, we expect cohabiting individuals to exhibit more economic independence than married individuals. This will mean that cohabiting women (compared with married women) are expected to spend more minutes per day in market work and fewer minutes in nonmarket home production.

The expectations for cohabiting men are less clear given that labor force participation for men may be so strong and normatively proscribed as to make it more

difficult to find differences by union type among men than among women. Further, cohabitating men, like cohabitating women, have few incentives to invest in nonmarket work. Whatever tendency cohabiting men might have to be more gender equitable in their time devoted to housework compared with their married counterparts may be offset by lower standards regarding household chores (Davis et al. 2007). In other words, lifestyles may be less codified in cohabiting households with regard to housework than marital households, minimizing differences in time spent in nonmarket work between cohabitating men and married men.

Second, we expect to find more gender similarity in the time allocation of men and women who are cohabiting compared to married men and women in each country, at least before controls for individual and family circumstances. However, we expect that the cohabiting-married couple differences in time spent in paid and unpaid work will be largest in Italy, followed by the United States and smallest in France. Before describing the time use data for each country, we briefly discuss each country context.

3. The French, Italian, and American context

Cohabitation should be most “marriage like” in France and most distinct from marriage in Italy, with the U.S. somewhere in between. Cohabitation is widespread in France, often an alternative to marriage, and childbearing within cohabiting relationships is common. Within the United States, individuals often cohabit before marriage or after divorce but these types of relationships tend to be short-lived and unstable. Although childbearing frequently occurs in cohabiting relationships in the U.S., there is a strong social class gradient, with much greater likelihood of parenting in low-income than in high-income cohabiting relationships. Finally cohabitation is not common in Italy, despite growing somewhat since 2000, and childbearing within cohabiting relationships is much less socially approved than in either France or the United States. Hence, the three countries make an interesting contrast for this study.

France, Italy, and the United States are also characterized by diverging welfare states. The U.S. is usually grouped together with countries characterized by a liberal welfare regime (Australia, Canada, United Kingdom) where the market and individual responsibility are central and the state provision of welfare is minimal (Esping-Andersen 1990). Though traditionally classified with countries with a conservative welfare state, France has a generous family policy in common with social-democratic countries, especially by providing high-quality and relatively inexpensive childcare (Lewis 1992, Gauthier 2002). Southern welfare states, represented here by Italy, are characterized by a highly fragmented social protection system, which can be generous (e.g., old age pensions or a universal health care system) or nonexistent (e.g., no

national minimum income), but also by the central position of the Catholic Church and the family. It is especially the institution of the family that makes up for the gaps in social protection, particularly with regard to unpaid care work that is predominantly performed by women (Ferrera 1993 and 1996, Saraceno 1994).

3.1 A note on cohabitation and marriage in France

Cohabitation in France was marginal before the social movements of 1968 (Roussel 1978). At the end of the 1970s, cohabitation replaced marriage as the main way of living as a couple for French youth. It was then considered as a kind of “marriage on a trial basis” and the birth of the first child usually triggered marriage. In the 1980s and 1990s, the birth of a child gradually lost its impact on marriage. The number of children born outside marriage was 6.8% in 1970, 11.4% in 1980, 30% in 1990, and 40% by the end of the 1990s (Martin and Théry 2001). Only in Sweden and Denmark are rates of birth to unmarried couples higher than in France.

Marriage is increasingly delayed in France: in the 1990s, 87% of partnerships began with cohabitation whereas it was only 16% in the 1960s. However, cohabitation is not only about delayed marriage: increasingly, marriage is no longer a necessary step in becoming an adult (Kiernan 2004). France appears very close to Scandinavian countries in this respect as 12.9% of the French cohort born between 1960 and 1971 went through all the standard life events (1st job, 1st parental home departure, 1st cohabitation, 1st child) without marrying (compared with 13.8% in Denmark and 22.5% in Sweden) (Lesnard et al. forthcoming). Since 1999, cohabiters in France have the possibility of obtaining a legal status (*Pacte civil de solidarité* - Pacs) that was originally designed to give access to some of the protections of marriage to same-sex couples (which they obtained in 2013 with the extension of marriage to them) (Martin and Théry, 2001). Although the Pacs offer many of the same legal protections of marriage, there are still important matters where marriage offers greater protection, such as the death of the spouse. Within marriage, inheritance to the surviving spouse is automatic. In Pacs, however, there is no heir status unless a will is drafted.

The popularity of Pacs among heterosexual cohabiters is another sign of the increasing decline of marriage in France. Moreover, the divorce rate increased greatly from the 1970s onward. Whereas the yearly proportion of divorce was 3% in the 1960s, it reached 6% in the 1980s and is above 10% since the 2000s. The cost and the time needed to get a divorce have been reduced substantively over the years, in particular with the introduction of the possibility to obtain a divorce by mutual consent. From 2004 on, divorces by mutual consent can be as quick as one court hearing.

3.2 A note on cohabitation and marriage in Italy

The incidence of cohabitation in Italy remained very low and fairly stable until recently, with only around 4% of couples cohabiting according to the 2001 Census data and 5.9% in 2009 (ISTAT 2011b). For a long time cohabiters were largely formerly married individuals who could not legally remarry, or did not want to do so in order to maintain welfare entitlements (e.g., pension rights for widows) or to preserve inheritance rights for their offspring. However, the share of unmarried individuals is progressively increasing among cohabiters, from 45% in 2003 to 54% in 2009 (ISTAT 2011b), becoming also more an alternative way to form the first union.

Divorce was not introduced in Italy until 1970, and it is a rather long two-stage process. A legal separation for at least three years is needed before a divorce may be requested, while the actual divorce still requires several years to be completed⁹ thus preventing remarriage. Although both separations and divorces have been growing constantly over time, overall marriage dissolution in Italy is still comparatively low among EU countries, with a risk of separation after five years of around 5% for the marriages contracted in 2000 (respectively less than 2% for the marriage cohort 1975), and a risk of around 13% after ten years (less than 5% for the marriage cohort 1975) (ISTAT 2013).

Cohabitation as a way to start a first co-residential union among young people is beginning to grow, with around one in four marriages preceded by cohabitation for the youngest marriage cohort in the most recent years (Gruppo di Coordinamento per la Demografia 2007). Marriage is still the most common way to begin a first union for the overwhelming majority of Italians, but marriage takes place at increasingly later ages and is later than in most other countries in Europe. The average age at first marriage was 30 years for women and 32 years for men in 2005 (ISTAT 2007) and rose to 30.8 and 33.8 respectively, in 2012. Cohabiters, in Italy, are more concentrated among highly educated, secularized, working individuals living in large cities in the Northern regions of the country (Nazio 2008, ISTAT 2011b). Despite a long-standing debate, there is no legal recognition of cohabitation in Italy; cohabiting partners have no rights or obligations toward each other and are treated as unrelated individuals.

⁹ The process of divorce, depending whether the consensual (the most common) or judicial form is chosen, may last up to ten years, and no less than three years (plus an average length of around two to three years for the completion of the two legal processes required to obtain a divorce sentence) (ISTAT 2010).

3.3 A note on cohabitation and marriage in the United States

In Europe, cohabitation is often “marriage-like,” lasting for years; in the U.S. cohabitation tends to be short-lived. Andrew Cherlin (2009), in his book *The Marriage Go-Round*, argues that the U.S. is exceptional in its pattern of cohabitation. Ten percent of U.S. women have had three or more partners (either husbands or cohabiting partners) by the time they reach age 35, more than twice the percentage for women in European countries with the highest rates of union dissolution (Cherlin 2009, 19). These high rates of partnering and repartnering make for a much more turbulent family system in the U.S. than elsewhere. Relative to marriage, however, cohabitation is much less stable given that the probability of a first marriage ending in separation or divorce within five years is 20 percent compared with the 49 percent probability of a premarital cohabitation dissolving within five years (Bramlett and Mosher 2002).

The experience of living as an unmarried partner before marrying has rapidly become the modal experience for younger cohorts in the U.S. For marriages formed between 1997 and 2001, 62 percent were preceded by cohabitation (Kennedy and Bumpass 2008). Cohabitation is also increasingly an alternative to remarriage after separation and divorce, but long-term cohabitations are still relatively uncommon.

An increasing proportion of cohabiting households include children—in the U.S. estimates overall are that about 40 percent of unmarried households have children (Fields and Casper 2001), with half of children born to the couple and the other half the children that one of the parents had prior to entering the cohabitation (Acs and Nelson 2002). Currently, 40 percent of U.S. births are to women who are not married (Hamilton et al. 2009). Estimates from the Fragile Families Study suggest that as many as 50 percent of these births are to an unmarried mother who is living with the father of her child at the time of the birth. However, only a little over half of these couples are still together by the time the child is five years old (Carlson and McLanahan 2010): 28 percent are married by the time the child is age five, 28 percent are still cohabiting, and the rest – 44% – are no longer living together in the same household.

The U.S. is arguably the most complex context because the rights and benefits conferred to married and cohabiting individuals vary by state and employment circumstances. Although there are many federal provisions that advantage married couples over cohabitating couples, particularly with regard to the tax code and insurance coverage, many other rights and benefits depend on one’s state of residence or the particular policies of private employers. For example, a handful of states have statutes on their books that actually criminalize cohabitation (Mahoney 2005). About 15 states acknowledge common law marriages, where cohabitating couples that reside together for a prolonged period of time and present themselves publicly as husband and wife but do not have a legal marriage certificate, can still have the same legal rights as a married couple. Nearly all the statutes require that the couple indicate an intention to be

married to qualify as a common law marriage. Separate from common law marriages are domestic partnership registries, which provide cohabiting couples some legal protections in the states that offer them. These registries are largely a response to the fact that same sex couples are not permitted to marry in most states.¹⁰ As such, some of the domestic partnership and “civil union” laws (e.g., in California and Vermont) are crafted solely for same-sex couples and exclude heterosexual couples.

4. Data and analysis plan

We use recent time diary data from France, Italy, and the U.S. to assess gender differences in time allocation between those who are cohabiting versus those who are married.

4.1 French time use survey

The French data come from the 2009-2010 French Time Use Survey that was conducted by the French National Statistical Institute (*Institut national de la statistique et des études économiques* – Insee). Face-to-face interviews were carried out among 12,053 households and 18,380 individuals aged 11 years old and above¹¹. The response rate¹² at the household level was of 68%. In addition to household and individual questionnaires, one household member aged 11+ was randomly selected and had to respond to an individual questionnaire. She also had to fill a paper diary on which she described her activities for a predetermined day in ten minute intervals.

4.2 Italian time use survey

The Italian data come from the Italian 2008-09 Time Use Survey (Indagine Multiscopo sulle Famiglie – Uso del Tempo), carried out by the Italian National Statistical Office (ISTAT) between February 2008 and January 2009 by face-to-face (or proxy) interview. The survey has a sample of 44,606 individuals within 18,250 households and is representative of the Italian population (ISTAT 2011a). The survey collected socio-

¹⁰ At the time of this writing, same sex couples could marry in 17 states and the District of Columbia. They could not marry in 33 states.

¹¹ Teenagers in the age range 11-17 are largely under-represented in this survey.

¹² The response rate is actually higher since this figure does not take into account ineligible addresses. The size of the sample of addresses was 17,800.

demographic information on individuals and households as well as detailed weekly (over 15,600) and daily (almost 41,000) individual diaries for all members of the household aged three (for daily) or fifteen (weekly) years and older. For the empirical analyses of this study we make use of information from individual and household questionnaires, plus the self-compiled daily diaries, covering 24 hours periods on weekdays or weekend days. Weights have been applied accordingly to correct for both sampling design and for day of the week.

4.3 American Time Use Survey (ATUS)

The U.S. data come from the 2003-2007 American Time Use Survey (ATUS), a nationally representative cross-sectional time-use survey launched in 2003 by the U.S. Bureau of Labor Statistics (BLS). The ATUS interviews a randomly selected individual age 15 and older from a subset of the households that have completed their eighth and final interview for the Current Population Survey (CPS), the U.S. monthly labor force survey. Using a stratified sampling design, approximately 1,780 interviews were conducted per month in 2003 and 1,160 per month in 2004 and subsequent years, yielding an estimated total of 77,000 interviews over the 2003-2007 period. Interviews for the ATUS typically take place between two and five months after the household's last CPS interview. Using computer-assisted telephone interviews, respondents provide a detailed account of what they were doing between 4:00 a.m. of the previous day and 4:00 a.m. of the interview day (a 24-hour period). ATUS interviewing occurs continuously over the course of the year, with each ATUS respondent interviewed once. ATUS data files are released annually. We combine five years of data to increase sample sizes. The response rate was 57.8% in 2003, 57.3% in 2004, 56.6% in 2005, 55.1% in 2006, and 52.5% in 2007. We apply weights that adjust for nonresponse and oversampling of some groups. Evidence suggests that weights help correct for sources of nonresponse bias (Abraham et al. 2006).

4.4 Sample

For each country, we restrict our analysis to men and women who are currently in heterosexual unions, either living with a spouse or living with an unmarried partner. For example, a person who is legally separated, but living with an unmarried partner is classified as a cohabiter. We restrict the age range to those aged 18 to 54 so as not to include older ages when a significant portion of the sample may be transitioning to retirement. Although including the 18-25 aged population does increase the possibility

that students will be included, only a small minority of respondents who are married or cohabiting attends college in each country. The sample size for France is 10,440 individuals (3,472 cohabiting and 6,968 married individuals). For Italy it is 12,139 individuals (941 cohabiting and 11,198 married individuals). For the U.S., it is 29,352 individuals (1,921 cohabiting and 27,431 married individuals).

Table 1 provides descriptive characteristics of the samples: the age distribution, percentage with a university degree (or higher), percentage with children under age 18 in the household, along with number of children and age of the youngest child for households with at least one child, percentage employed, and employment status of the partner. We also include a control for whether the diary was done on a weekend day as time allocation varies considerably between weekdays and Saturday or Sunday. We control for these characteristics in the regression models to standardize for factors that vary across the households of married and cohabiting individuals and that also may vary across country contexts.

Cohabitors in each country are younger than those who are married. The mean age for the married sample in the U.S. is 40 years old, with Italy and France's mean age around 42 years, two years older than in the U.S. Cohabitors in Italy are also older than in France and the U.S.: an average of almost 37 years in Italy compared with an average of about 35 years in France and 33 in the U.S. The percentage of the population with a college degree is higher in the U.S. (33%) than in France (25%) or Italy (11%), reflecting the proportion of those with tertiary education in each country (OECD 2009). Whereas cohabitors in Italy and France are as likely to be college educated as those in marriages, cohabitors in the U.S. are much less likely to have a college degree than those who are married. Married and cohabiting couples in the U.S. are more likely to have no children in the household than in France or Italy. When couples have children, children are slightly younger, on average, in the U.S. than in the France or Italy. There is a larger gender gap in employment in Italy than in France or the U.S., with Italian men having the highest employment rates and Italian women having the lowest employment rates of any of the countries. The lower activity rate of Italian women is well known in the literature and linked to a still widespread single male-breadwinning arrangement, affected by the scarcity of public services for the care of young children and elderly, by low availability of part-time jobs, by a dual labour market, and by higher difficulties faced by women in (re)entering the labour market (Gonzalez, Jurado & Naldini 2000; O'Reilly 2006).

Table 1: Weighted percentage distributions of demographic characteristics of married and cohabiting individuals in the 2009 French, 2008 Italian, and 2003-2007 American Time Use Surveys

	France			Italy			United States		
	Total	Cohabiting	Married	Total	Cohabiting	Married	Total	Cohabiting	Married
% Cohabiting	31.75	-	-	8.54	-	-	8.44	-	-
Age									
18-24	3.85	10.55	0.73	0.92	2.81	0.74	5.60	22.67	4.03
25-34	25.21	41.43	17.66	19.08	41.69	16.97	27.30	38.18	26.29
35-44	35.13	30.32	37.37	42.58	38.66	42.94	34.12	24.01	35.06
45-54	35.81	17.70	44.23	37.42	16.84	39.35	32.98	15.14	34.62
Mean Age	40.07	35.11	42.37	41.52	36.57	41.99	39.20	32.93	39.78
% College Grad or More	24.77	27.84	23.35	11.00	9.5	11.25	32.69	19.57	33.90
Number/Age of Children									
None	27.19	40.33	21.08	18.12	47.26	15.39	38.53	69.94	35.63
One	25.36	27.10	24.55	32.34	32.98	32.34	22.59	16.18	23.18
Two or more	47.45	32.57	54.38	49.54	19.76	52.27	38.88	13.88	41.19
Children ages 0-2 in hhld	16.37	19.71	14.81	17.06	24.58	16.36	18.67	12.57	19.23
Children ages 3-6 in hhld	21.65	23.98	20.57	22.83	17.04	23.37	23.03	11.10	24.13
Children ages 7-17 in hhld	47.34	33.81	53.63	44.23	18.49	46.63	41.96	15.25	44.42
% Employed	82.27	80.70	82.99	73.05	82.4	72.17	81.05	81.41	81.02
Men	90.43	85.97	92.65	93.24	92.03	93.36	91.82	87.57	92.23
Women	75.48	75.93	75.28	55.54	73.45	53.92	70.94	75.20	70.56
% Fulltime	75.17	79.49	73.26	70.99	74.31	70.59	71.97	74.35	71.75
% Parttime	24.83	20.51	26.74	29.01	25.69	29.41	28.03	25.65	28.25
% with employed partner	81.71	80.35	82.35	73.64	81.23	72.93	80.14	78.98	80.25
Men (wife employed)	76.16	77.69	75.39	56.66	73.44	55.03	70.02	75.18	69.52
Women (husband employed)	86.33	82.75	87.90	88.36	88.47	88.35	89.64	82.82	90.25
Day of the week									
Saturday	21.87	22.86	21.41	14.06	13.64	14.09	14.31	15.44	14.21
Sunday	21.06	20.80	21.19	13.93	13.15	14.01	14.31	13.25	14.41
Unweighted sample Size	10440	3472	6968	12139	941	11198	29352	1921	27431

4.5 Analysis plan

We first show the average minutes per day spent in paid/market work and in unpaid/nonmarket work for the entire sample of cohabitating men and women and married men and women. We also disaggregate estimates of unpaid work into three components: childcare, housework, and shopping for the household.

We then turn to multivariate estimates aimed at assessing whether time allocations differ for those who are cohabiting versus those who are married. First, we estimate logistic regression models predicting the likelihood of employment (with employment status measured outside the diary through individuals' interviews and both the unemployed and non-employed classified as "not employed"). Then we use the employed sample to estimate OLS regression models predicting minutes per day spent in paid market work (including commuting time) on the diary day. Next we estimate OLS regression models predicting minutes per day in unpaid nonmarket household work (the summation of housework, childcare, and shopping for household goods and services). These models are estimated using the total sample and are not restricted to the employed sample. Finally, for those with children in the household under age 18, we estimate OLS regression models predicting minutes of childcare on the diary day. We focus on minutes in childcare for parents because allocation of time to childcare may differ in significant ways from allocation of time to other unpaid work such as housework. Individuals may be more likely to want to bargain out of doing housework, for example, than childcare (Raley et al. 2012).

In the predictions of employment and minutes of paid work, we estimate two models, one that only includes a dichotomous indicator for being in a cohabiting relationship (as opposed to being married) and a second model that introduces controls to adjust for differences in age, education, children (their number and presence of any in each age bracket), and employment. That is, we use OLS regression models to test for the statistical significance of cohabitation on the allocation of time to paid and unpaid work, unadjusted and adjusted for observed differences that are likely to influence the time allocation and that are likely to vary by union status.

5. Results

Table 2 shows estimates of average time (in minutes per day) spent on the diary day in market and nonmarket work activities. Estimates are shown for cohabiting and married men and women in each country, along with the ratio of the estimate for men relative to women.

Cohabiting women do more paid work than married women, with the difference of only a few minutes a day in France, closer to 40 minutes a day in the U.S. and over two hours a day in Italy. This aligns with the expectation that differences between married and cohabiting women might be the smallest in size in France and the greatest in Italy. However, the differences among men do not align with predictions: Cohabiting men work less than married men in both France and the U.S. and somewhat more in Italy. Italian men also work more minutes per day than either their French or American counterparts.

Table 2: Weighted means of married and cohabiting men's and women's minutes/day spent in market and nonmarket work

	France							
	Cohabiting				Married			
	Total	Men	Women	Ratio (M/W)	Total	Men	Women	Ratio (M/W)
Market (Paid) Work	196.6	235.2	161.7	1.45	202.6	258.6	157.7	1.64
Nonmarket (Unpaid) Work	122.4	107.1	237.9	0.45	194.4	110.3	261.6	0.42
Childcare	53.4	31.5	73.2	0.43	48.6	33.8	60.4	0.34
Childcare (parents only)	88.3	53.8	117.2	0.46	60.0	41.2	75.7	0.34
Housework	100.0	56.7	139.2	0.41	123.1	59.7	173.7	0.44
Shopping	22.4	18.8	25.6	0.74	22.7	16.8	27.5	0.58
N	3472	1692	1780		6968	3228	3740	

	Italy							
	Cohabiting				Married			
	Total	Men	Women	Ratio (M/W)	Total	Men	Women	Ratio (M/W)
Market (Paid) Work	355.8	430.1	287.5	1.50	279.2	414.6	162.3	2.55
Nonmarket (Unpaid) Work	212.8	104.4	315.6	0.33	271.8	119.2	411.0	0.29
Childcare	57.3	31.1	80.7	0.38	53.7	33.1	71.6	0.46
Childcare (parents only)	110.7	60.9	155.6	0.39	63.5	38.8	84.9	0.46
Housework	127.9	53.6	196.2	0.27	177.2	55.6	282.2	0.20
Shopping	27.6	19.7	38.7	0.51	40.9	30.6	57.2	0.53
N	941	453	488		11198	5152	6046	

	United States							
	Cohabiting				Married			
	Total	Men	Women	Ratio (M/W)	Total	Men	Women	Ratio (M/W)
Market (Paid) Work	291.7	330.4	252.6	1.31	289.9	371.7	213.5	1.74
Nonmarket (Unpaid) Work	208.5	160.2	257.2	0.62	248.0	175.9	315.3	0.56
Childcare	40.9	21.6	60.4	0.36	63.2	41.2	83.6	0.49
Childcare (parents only)	100.5	63.1	124.6	0.51	93.3	60.4	125.2	0.48
Housework	118.9	96.8	141.2	0.69	132.6	93.7	168.9	0.55
Shopping	48.7	41.9	55.6	0.75	52.2	40.9	62.8	0.65
N	1921	876	1045		27431	12414	15017	

Men's minutes in paid work are higher than women's in every comparison, although the number of minutes allocated to paid work varies across countries and across union types. Ratios of men's to women's time in paid work is always higher in marriage than in cohabitation, suggesting that specialization is likely greater in marriage than in cohabitation. The ratio of men's to women's time in market work is highest for Italian married men and women (2.55), followed by U.S. married men and women (1.74), and U.S. married men and women (1.64). Gender gaps within union type are actually smallest in the U.S., followed by France, and largest in Italy.

In terms of unpaid work, Italy stands out from France and the U.S. In all countries and among cohabiting and married individuals, women's allocation of time to unpaid work surpasses men's allocation, but the gap is largest in Italy. Italy is the least gender egalitarian – or the most gender specialized – in terms of time allocation to both market and nonmarket work. In Italy, women spend more time in unpaid work than in either the U.S. or in France, and Italian and French men spend less time in unpaid work than in the U.S. Married Italian men average only 29 percent as much time on unpaid work activities as married Italian women, and 36 percent as much time in cohabiting relationships. The comparable percentages for those who are married in France is 42 percent among the married, 45 percent among cohabiters. In the U.S., married men average about 56 percent as much time as married women in nonmarket work and cohabiting men average about 62 percent as much time in these activities as cohabiting women.

In all countries, ratios of men's to women's time in nonmarket work are higher – indicating more equal sharing – among cohabiters than among married individuals. Ratios for France and the U.S. are closer to gender equity than they are for Italy. This finding for Italy accords with expectations.

Although cohabitation is more like marriage in France than in the U.S., differences by union type are somewhat similar in France and the U.S. Thus, we do not observe as much differentiation between France and the U.S. as we initially expected. However, these comparisons are not adjusted for other differences across individuals and across countries that may influence conclusions about the degree of specialization in marriage versus cohabitation. Hence we turn to multivariate analyses.

Table 3 shows logistic regression coefficients for models predicting the likelihood that women and men are employed. Aligned with our expectation, cohabiting women are more likely to be employed than married women in all three contexts and the coefficients remain statistically significant in the three countries after adding controls. Similarly, cohabiting men are less likely to be employed than married men in all three contexts. Controls for age, education, children, and a partner's employment increase the correlation in Italy and France, and reduce it only slightly in the U.S.

Table 3: Logit regression coefficients of employment of cohabiting and married women and men, age 18-54 in France, Italy, and the U.S.

	Women					
	France		Italy		United States	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Constant	1.11 ***	-8.28 ***	0.16 ***	-4.96 ***	0.87 ***	-1.15 **
Cohabiting	0.04	0.47 **	0.86 ***	0.80 ***	0.23 ***	0.17 *
Age (years)		0.43 ***		0.24 ***		0.14 ***
Age (squared)/100		-0.52 ***		-0.29 ***		-0.19 ***
College Grad		1.21 ***		1.08 ***		0.59 ***
Number and Ages of Children						
One		0.33		-0.36 ***		-0.32 ***
Two or more		0.26		-0.78 ***		-0.72 ***
Children ages 0-2 in hhld		-0.87 ***		-0.15 ***		-0.74 ***
Children ages 3-5 in hhld		-0.87 ***		0.00		-0.39 ***
Children ages 7-17 in hhld		-0.61 *		-0.06 ***		0.10
Partner's Employment						
Partner Employed		1.28 ***		0.70 ***		0.29 ***
Unweighted sample Size	5484	5484	6534	6534	16062	16062

	Men					
	France		Italy		United States	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Constant	2.53 ***	-2.39	2.64 ***	-0.50 ***	2.47 ***	-0.04
Cohabiting	-0.72 ***	-0.80 ***	-0.20 ***	-0.44 ***	-0.52 ***	-0.43 ***
Age (years)		0.22 **		0.15 ***		0.13 ***
Age (squared)/100		-0.29 **		-0.20 ***		-0.19 ***
College Grad		0.25		1.35 ***		0.95 ***
Number and Ages of Children						
One		-0.08		0.11 ***		0.16
Two or more		0.03		0.03 ***		0.30
Children ages 0-2 in hhld		0.38		0.38 ***		0.05
Children ages 3-5 in hhld		0.06		-0.03 ***		0.00
Children ages 7-17 in hhld		0.03		-0.04 ***		-0.17
Partner's Employment						
Partner Employed		1.29 ***		0.81 ***		0.26 ***
Unweighted sample Size	4821	4821	5605	5605	13290	13290

Note: ***p-value < 0.001, **p-value < 0.01, *p-value < 0.05

Reference categories: Married, Not a college graduate, No children, Partner not Employed. Age of child variable is a 1/0 indicator variable that is not mutually exclusive. For example, parents with multiple children may have a "1" for a child in the 0-2 age range as well as a "1" for a child in the 3-6 age range.

Other covariates behave according to expectation. Employment increases with age for both men and women but at a decreasing rate (i.e., there is a negative coefficient on the age squared variable). College graduates have a statistically significantly higher likelihood of employment in all countries and for both men and women. More children are associated with lower levels of women's employment in Italy and the U.S. and are positively associated with employment of fathers of two or more children (vis-à-vis those without children). Net of number of children, age of the child(ren) tends to be

positively associated with employment for women – that is, as (any) children’s age increases, the likelihood of employment increases. A partner’s employment is positively associated with men’s and women’s employment in all countries, suggesting spousal homogamy on this variable.

Table 4 shows OLS regression coefficients for models predicting minutes of paid work for employed men and women in each country. In the binary models, cohabitation is associated with more minutes of paid work for women in Italy and the U.S. and fewer minutes of paid work for men in the U.S. In France cohabitation is not associated with the paid work time of men and women, with or without controls. Once controls are introduced, the positive coefficient for cohabitation is reduced and is no longer statistically significant for women in the U.S. The large positive coefficient is also greatly reduced for Italian women once controls are introduced (from an estimated difference of 125 minutes to 51 minutes per day between cohabiting and married women) but the coefficient remains statistically significant. For men, the positive coefficient for cohabitation is reduced from 16 to three minutes/day for Italian men and remains statistically significant and unchanged in size for American men (at approximately -27 minutes per day).

Table 4: OLS regression coefficients of market (paid) work of employed cohabiting and married women and men, age 18-54 in France, Italy, and the U.S.

	Women					
	France		Italy		United States	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Constant	206.22 ***	434.31 ***	162.34 ***	525.11 ***	300.01 ***	311.90 ***
Cohabiting	4.57	11.02	125.20 ***	50.50 ***	31.56 ***	12.65
Age (years)		-5.77		-4.69 ***		6.67 ***
Age (squared)/100		7.29		4.22 ***		-9.31 ***
College Grad		9.43		-1.97 ***		10.71 *
Number of Children						
One		36.33 *		2.94 ***		-42.10 ***
Two or more		57.81 *		0.52		-79.74 ***
Children ages 0-2 in hhld		-96.15 ***		-108.02 ***		-37.54 ***
Children ages 3-6 in hhld		-25.12		-24.61 ***		11.94 *
Children ages 7-17 in hhld		-65.86 ***		-12.26 ***		19.44
Partner's Employment						
full-time employed (reference)+ part-time (women only)						
not employed (inactive/unemp.)		-6.48		26.56 ***		-8.36
Diary Day						
Saturday		-218.63 ***		-210.03 ***		-284.36 ***
Sunday		-272.40 ***		-342.04 ***		-311.14 ***
Unweighted sample Size	4245	4245	3672	3672	11323	11323

Table 4: (Continued)

	Men					
	France		Italy		United States	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Constant	275.66 ***	376.37 **	414.57 ***	656.35 ***	400.74 ***	584.83 ***
Cohabiting	-8.47	-4.31	15.56 ***	3.30 ***	-26.69 **	-27.94 ***
Age (years)		1.61		-4.02 ***		-3.99
Age (squared)/100		-2.05		2.13 ***		4.86
College Grad		-11.27		9.36 ***		5.32
Number of Children						
One		32.54		19.96 ***		2.84
Two or more		39.33		33.27 ***		15.13
Children ages 0-2 in hhld		3.66		-19.61 ***		-29.50 **
Children ages 3-6 in hhld		-8.57		-15.56 ***		-11.57
Children ages 7-17 in hhld		-31.76		-13.79 ***		-15.87
Partner's Employment						
full-time employed (reference)+						
<i>part-time (women only)</i>		-13.64		6.32 ***		9.98
not employed (inactive/unemp.)		-25.60		8.37 ***		18.90 ***
Diary Day						
Saturday		-296.20 ***		-285.94 ***		-340.20 ***
Sunday		-326.60 ***		-455.03 ***		-397.91 ***
Unweighted sample Size	4325	4325	5200	5200	12305	12305

Note: ***p-value < 0.001, **p-value < 0.01, *p-value < 0.05

Table restricted to employed respondents. Reference categories: Married, Not a college graduate, No children, Partner Employed

Fulltime, Weekday diary. Age of child variable is a 1/0 indicator variable that is not mutually exclusive. For example, parents with multiple children may have a "1" for a child in the 0-2 age range as well as a "1" for a child in the 3-6 age range.

Table 5 shows OLS regression coefficients for models predicting minutes of unpaid/nonmarket work for all men and women in each country. Estimates for being in a cohabiting couple are large and negative for women in each country in the bivariate models, but only remain statistically significant and negative in Italy (i.e., 23 fewer minutes for Italian cohabiting women compared to married women) net of controls for age, education, children, and employment. In both the French and American sample, controls eliminate the negative coefficient for cohabiting women and the estimate is now positive but small and not statistically significant. For men, the coefficient for cohabitation is also negative in the bivariate models but only remains statistically significant in Italy where it is estimated that cohabiting men average nine minutes less per day on nonmarket work activities than married men.

Table 5: OLS regression coefficients of nonmarket (unpaid) work (minutes/day) of cohabiting and married women and men, age 18-54 in France, Italy, and the U.S.

	Women					
	France		Italy		United States	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Constant	261.60 ***	105.78	405.54 ***	385.57 ***	315.32 ***	66.41 *
Cohabiting	-23.67 *	3.58	-93.74 ***	-23.19 ***	-58.09 ***	5.42
Age (years)		4.10		1.69 ***		9.23 ***
Age (squared)/100		-1.91		-1.43 ***		-8.23 ***
College Grad		-10.74		-27.12 ***		3.97
Number and Ages of Children						
None (reference)						
One		32.11 *		51.06 ***		75.00 ***
Two or more		71.89 ***		86.10 ***		133.47 ***
Children ages 0-2 in hhld		122.74 ***		90.74 ***		81.81 ***
Children ages 3-6 in hhld		38.29 **		39.79 ***		21.02 ***
Children ages 7-17 in hhld		19.72		11.94 ***		-26.33 ***
Employed		-84.76 ***		-195.93 ***		-140.31 ***
Partner's Employment						
Full-Time Employed (reference)						
Part-Time (women only)						
Not Employed (inactive/unemp.)		-8.17		-13.65 ***		34.04 ***
Diary Day						
Mon-Fri (reference)						
Saturday		18.83		25.54 ***		51.02 ***
Sunday		5.77		-65.62 ***		0.49
Unweighted sample Size	5484	5484	6534	6534	16062	16062

Table 5: (Continued)

	Men					
	France		Italy		United States	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Constant	110.35 ***	71.86	116.83 ***	26.05 ***	175.89 ***	76.21 *
Cohabiting	-3.29	-2.06	-11.74 ***	-9.13 ***	-15.68 **	10.77
Age (years)		1.74		8.90 ***		6.52 ***
Age (squared)/100		-2.38		-10.04 ***		-6.77 **
College Grad		32.06 ***		-9.67 ***		9.39 **
Number and Ages of Children						
None (reference)						
One		22.46 ***		14.44 ***		35.45 ***
Two or more		39.22 ***		6.82 ***		53.88 ***
Children ages 0-2 in hhld		47.68 ***		48.53 ***		36.24 ***
Children ages 3-6 in hhld		8.54		22.18 ***		21.93 **
Children ages 7-17 in hhld		-0.90		6.90 ***		-17.99 **
Employed		-46.22 ***		-135.02 ***		-110.84 ***
Partner's Employment						
Full-Time Employed (reference)						
Part-Time (women only)		-3.90		-12.08 ***		-12.39 **
Not Employed (inactive/unemp.)		-24.29 ***		-39.29 ***		-27.98 ***
Diary Day						
Mon-Fri (reference)						
Saturday		49.53 ***		98.78 ***		100.53 ***
Sunday		21.29 ***		43.18 ***		81.71 ***
Unweighted sample Size	4920	4920	5605	5605	13290	13290

Note: ***p-value < 0.001, **p-value < 0.01, *p-value < 0.05

Reference categories: Married, Not a college graduate, No children, Partner Employed Fulltime, Weekday diary. Age of child variable is a 1/0 indicator variable that is not mutually exclusive. For example, parents with multiple children may have a "1" for a child in the 0-2 age range as well as a "1" for a child in the 3-6 age range.

Table 6 restricts the analysis to those who are parents (i.e., living in households with children under age 18) and shows OLS regression coefficients for predictions of minutes spent in childcare for fathers and mothers in each country. The coefficients for cohabitation are positive in the bivariate models (Model 1) for both men and women in France and Italy. In the U.S., they are small and not statistically significant. Cohabitors seem to spend *more* time in childcare than married individuals. The estimated coefficients are about three times as large for French and Italian women as they are for

French and Italian men. Once controls are introduced in model 2, however, there are no longer significant differences between cohabiters and married men in France and the coefficients are small for Italian men. Cohabiting parents tend to be younger than married parents and their children are younger, on average, than the children of married parents. It is likely that the control for age of children largely “explains” the cohabiting/married differential in childcare in the bivariate analysis.

Table 6: OLS regression coefficients of childcare (minutes/day) of cohabiting and married mothers and fathers, age 18-54 in France, Italy, and the U.S.

	Women					
	France		Italy		United States	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Constant	75.65 ***	22.81	109.00 ***	13.46 ***	125.19 ***	-137.87 ***
Cohabiting	41.51 ***	20.58 **	62.05 ***	27.14 ***	-0.60	5.73
Age (years)		4.32		6.34 ***		12.45 ***
Age (squared)/100		-7.52		-11.35 ***		-16.56 ***
College Grad		18.50 **		31.38 ***		32.42 ***
		0.00				
Number and Ages of Children						
One (reference)						
Two or more		21.04 ***		8.88 ***		20.43 ***
Children ages 0-2 in hhld		85.04 ***		109.40 ***		99.74 ***
Children ages 3-6 in hhld		24.17 **		46.86 ***		37.41 ***
Children ages 7-17 (reference)						
Employed		-33.51 ***		-26.17 ***		-46.24 ***
Partner's Employment						
Full-Time Employed (reference)						
Part-Time (women only)						
Not Employed (inactive/unemp.)		15.80		-29.71 ***		14.68 ***
Diary Day						
Mon-Fri (reference)						
Saturday		-23.69 **		-23.14 ***		-39.51 ***
Sunday		-27.41 ***		-36.08 ***		-41.96 ***
Unweighted sample Size	3948	3948	4173	4173	11801	11801

Table 6: (Continued)

	Men					
	France		Italy		United States	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Constant	41.21 ***	40.43	46.00 ***	-11.72 ***	60.38 ***	-53.97 **
Cohabiting	12.58 ***	0.29	19.74 ***	3.75 ***	2.73	6.31
Age (years)		1.47		4.19 ***		6.40 ***
Age (squared)/100 Age*cohabit		-3.55		-5.92 ***		-8.23 ***
College Grad		21.82 ***		7.17 ***		19.64 ***
Number and Ages of Children						
One (reference)						
Two or more		10.04 **		-0.43 ***		9.42 ***
Children ages 0-2 in hhld		41.21 ***		43.40 ***		45.52 ***
Children ages 3-6 in hhld		10.33 **		21.07 ***		24.60 ***
Children ages 7-17 (reference)						
Employed		-18.81 ***		-29.21 ***		-39.73 ***
Partner's Employment						
Full-Time Employed (reference)						
Part-Time (women only)		-5.32		-2.68 ***		-1.52
Not Employed (inactive/unemp.)		-16.78 ***		-13.37 ***		-16.42 ***
Diary Day						
Mon-Fri (reference)						
Saturday		9.90		13.50 ***		6.17 *
Sunday		4.70		14.28 ***		6.20 *
Unweighted sample Size	3512	3512	3973	3973	9937	9937

Note: ***p-value < 0.001, **p-value < 0.01, *p-value < 0.05

Table restricted to respondents with children under age 18. Reference categories: Married, Not a college graduate, Presence of child aged 7-17, Partner Employed Fulltime, Weekday diary. Age of child variable is a 1/0 indicator variable that is not mutually exclusive. For example, parents with multiple children may have a "1" for a child in the 0-2 age range as well as a "1" for a child in the 3-6 age range.

6. Discussion and conclusion

We explored whether greater equality in men's and women's time in paid and unpaid work emerged in cohabiting relationships relative to marital relationships and in contexts with stronger supports for marriage than cohabitation. Returning to our expectations at the outset, we find evidence consistent with a conclusion of more

similarity in time allocation between cohabitating men and women when compared with married men and women. Cohabiting women are more likely than married women to be employed and, when employed, cohabiting women in the U.S. and Italy tend to spend more time in paid work than married women (the differences in paid work hours between cohabiting and married women in the U.S. are explained by variation in age, education, and presence and age of children). In France, the country where cohabitation is an accepted form of alternative union to marriage, there is little variation in paid work hours across union type among women.

The findings for cohabiting men are more consistent across the three contexts—they are less likely to be employed than married men and controls do not explain away these differences in any country. These results might point to either a different composition of cohabiting men with weaker economic prospects (by preference or by constraint) more frequently selecting into cohabitation, or to a limited capacity to convert cohabitation into marriage among men with less stable or continuous attachment to employment. Only in the U.S. do cohabiting men average fewer minutes of paid work on their diary days than married men (when they are employed). Our initial expectations were that we might find fewer differences for men than women, given the strong norm of full time employment for men. This was not the case in the U.S., however, where differences were substantial between married and cohabiting men. This is likely driven by the large demographic variation of cohabiters in the U.S., including young people who cohabit prior to marriage, middle-aged people who cohabit as an alternative to marriage (often following a divorce), and individuals of low socioeconomic status cohabiting because they are not financially stable enough for marriage (a group where men in particular are underemployed). Cohabiting men in the U.S. however, do not spend more time in unpaid work, but rather in free time activities (data not shown).

Time in nonmarket activities is partially consistent with expectations of less gender differentiation in cohabitation than marriage, but only among women. Women do less nonmarket work in cohabiting relationships than in marriages. This difference is eliminated for the U.S. and French women – but not for Italian women – once we control for age, educational attainment, children, and a partner's employment. Perhaps in Italy, where cohabitation is still not widespread, women with a higher desire or convenience to break with (and renegotiate) traditional gender expectations in the division of work, as other research seem to suggest, are more likely to select into cohabiting than marital relationships (Nazio 2008). Nonmarket work allocations are only different for cohabiting and married Italian men who, in the face of slightly longer employment hours, may also benefit from a lowering of the (comparatively) higher standards in housework which seem to characterize cohabiting as compared to marital unions. The case of American men is complex, because cohabiting men appear to do

less nonmarket work than married men before demographic factors are considered, but that difference disappears once demographic factors are considered. This lends further support to the argument that those cohabiting in the U.S., particularly men, are a diverse group who may be at much different life stages (e.g. cohabiting prior to marriage compared with later in life after a divorce) and/or have varying economic prospects (e.g. struggling to find stable employment and cohabiting out of economic necessity compared with being retired). Finally, French men, like their female counterparts spend similar amounts of time in housework activities as married ones. This suggests that, again, cohabitation may be associated with the time invested in housework only in contexts where it is a more differentiated union type from marriage, which selects individuals with less conventional expectations about men's and women's participation in unpaid work.

Cohabitation is positively correlated with childcare time for French women and Italian women and men, suggesting that cohabiters are often a self-selected group with less conventional expectations when it comes to taking care of children. Even if it is still stigmatized in Italy to some extent, in Europe cohabitation may be seen as more freely chosen in contrast to the U.S., where it is sometimes an arrangement constrained by economic factors.

There is some evidence of greater gender differentiation between married men and women than among cohabiters in each of the country contexts we examine. Our expectations about the rank ordering of country contexts are only partially borne out by the findings. Greater gender differentiation between paid and unpaid work is found for Italy than for the U.S., which might be linked to the higher rate of non-employed women in Italy, where the economic dependency of the partner with less earning power is protected in case of dissolution, only when framed within a legal marriage. Differences between cohabiting and married women and men in paid work do seem stronger in Italy than in other contexts, as we expected. However, there are few differences between cohabiting and married women and men in paid and unpaid work in France where cohabitation is socially well accepted and considered as a normal partnership status along with marriage. In France, divorce can be quite easy and quick. Even though it cannot be as quick as separation for cohabiting couples, there is nonetheless evidence that marriage is no longer a strong binding relationship in France.

Perhaps cohabitation, particularly in France and Italy, is a choice connected to attitudes toward the family division of labor. If these attitudes vary by union type, as previous research suggests (Davis et al. 2007), they may not translate into dramatic variation in terms of doing housework, but they do when it comes to taking care of children for Italian and French women as well as for Italian men. This finding suggests that cohabitation may be a better place for reframing conventional gendered

expectations about childrearing when compared with marriage, especially where institutional frameworks support a male-breadwinner model (as is the case with Italy).

Because the data we use are cross-sectional, one of the limitations of our analysis is that we cannot sort out whether differences between cohabitation and marriage are due to selection into cohabitation rather than marriage. Indeed, many of the differences we observe in time use are explained by compositional differences between cohabiting and married individuals (particularly in the U.S.). Therefore, it may not be the status of cohabiter that matters in terms of division of labor, but rather two sets of factors that are connected to it. The first set of factors include the extent to which different types of unions are constrained by economic factors, as they tend to be in the U.S. to a greater degree than in France or Italy, and more generally Western Europe. The second set of factors concerns the extent to which cohabitation is socially accepted. In France, cohabitation is a status that is almost interchangeable with marriage and thus cohabiters are not necessarily a self-selected group with more progressive views on the division of labor. In Italy, cohabitation is not yet widely socially accepted or regarded as an equivalent to marriage and cohabiters are largely a self-selected group who may feel less confident in investing in unpaid work. Childcare, however, is an exception in both countries. In this respect, childcare is inherently different from the rest of unpaid housework chores because childcare entails unpaid work investment in a filial relationship that is going to last for a life time, further and beyond the risk of the parents still living together as a couple in the future. Housework, in contrast to childcare, includes investments specific to the couple relationship and is thus sensitive to the protections offered to the partners in the couple. In the U.S., cohabitation does not carry the same social approval as marriage and cohabiters are a diverse group of people who may be more difficult to generalize on social indicators when compared with European contexts. These results suggest new venues for research on cohabitation that carefully analyze the economic and social conditions that frame individuals' union selections as well as time use decisions.

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