

# **Common Law Marriage and male/female convergence in labor supply and time use**

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## **1. Introduction**

The association between labor supply and laws related to marriage and divorce has previously been analyzed both theoretically and empirically. Most of these studies have focused on effects of changes in divorce laws. This paper investigates whether availability of common law marriage (CLM henceforth) in the U.S helps explain variation in the labor force participation and hours of work of men and women over time and across states. To the extent that CLM facilitated specialization and trade in households following traditional gender roles the abolition of CLM could help explain some of the gender convergence in labor supply and time in household production that has been observed in recent decades. In addition we also investigate the association between CLM and hours of household production.

States accepting CLM offer their heterosexual residents an additional way of organizing their living-together arrangements by offering a choice between regular marriage and CLM, the latter involving lower costs of entering marriage (with CLM there is no need for a marriage certificate or ceremony) and vaguer rules in case of divorce. CLM is established when couples cohabit and hold themselves out as spouses by calling each other husband and wife in public, using the same last name, filing joint tax returns, or declaring their marriage on applications, leases, birth certificates and other documents. There are no rules regarding cohabitation time required for such marriage. A short term cohabiting relationship may also be called “marriage” if both spouses agree. A cohabiting couple who are engaged to be legally married almost certainly show enough intent to be married to be considered “married” in a CLM state. Otherwise CLM is like marriage, including the requirement of an official court-mandated divorce in the event of separation and acceptance by all other states and government institutions dealing with tax collection and redistribution of income.<sup>1</sup>

It follows from a number of theories of marriage that the better the legal protection states offer to married individuals specializing in household production in case of dissolution the more these individuals are likely to reduce hours of work in the labor force. To the extent that availability of CLM offers more legal protection to household producers at the margin between single status and marriage, it may discourage labor supply and encourage household production on the part of household producers

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<sup>1</sup> see Lind (2008) and the following links

<http://video.about.com/marriage/How-to-Qualify-for-a-Common-Law-Marriage.htm>

<http://WiHow.answers.com/topic/common-law-marriage>

[http://WiHow.co.travis.tx.us/dro/common\\_law.asp](http://WiHow.co.travis.tx.us/dro/common_law.asp)

<http://WiHow.unmarried.org/common-law-marriage-fact-sheet.html>

who are married or cohabit. In the context of traditional gender roles this implies a negative association between availability of CLM and the labor supply of women who are either married or cohabit. Men may then work more in the labor force when CLM is available. With gender roles inverted, namely with men more responsible for household production and women for bringing in income, the opposite is expected to hold.

We present a conceptual framework that also leads us to expect that where traditional gender roles prevail CLM would be associated with less labor supply by married or cohabiting women and more labor supply by the men who support them financially. In addition we expect similar results for singles. Our predictions are most relevant to people at the stage of couple formation, namely younger people. We thus concentrate our analyses on respondents under age 36 as we expect them to be most likely to make decisions regarding cohabitation and marriage and therefore to have a labor supply that is more responsive to changes in marriage laws. Marriage market analysis leads to make predictions regarding differential effects of CLM by education and ethnicity.

Our research is innovative in that we examine (1) legal effects on household production whereas previous research has linked variation in legal regimes to labor supply but not to time in household production; and (2) effects of changes in CLM availability on labor supply rather than of changes in divorce laws. Previous research has mostly examined labor supply effects of the replacement of fault- and consent-based divorce laws with no-fault and unilateral divorce. Differences in the timing of these replacements have been linked to changes in labor supply e.g by Peters (1986), Gray (1998), Stevenson (2007) and Genadek et al (2007). The association between divorce laws and household specialization was analyzed by Stevenson (2007). Another type of law that has been examined in the context of labor supply research is also related to divorce and deals with alimony rights: Chiappori et al. (2011) studied the effect of Canada's new legislation that granted alimony rights to cohabiting couples on labor force participation.

As there are no large US data sets that include individual information on CLM, we base our empirical study on comparisons between states that do and don't offer CLM and on variation over time in the availability of CLM. Most US states used to recognize CLM but have abolished this form of marriage. As of 2013, common-law marriage could still be contracted in 11 states: Alabama, Colorado, Iowa, Kansas, Montana, New Hampshire (posthumously for purposes of inheritance), Oklahoma, Rhode Island, South Carolina, Texas, and Utah, as well as in the Navajo Nation and in the District of Columbia. Over the period covered by our data CLM was abolished by Ohio (Oct 1991), Idaho (1996), Georgia (1997), and Pennsylvania (2005), which provides us with a quasi-experiment that we use in our analysis of state-level and individual-level data.

We analyze micro data from CPS-iPums for the period 1995-2011 in our investigation of labor outcomes and micro data from the ATUS for the period 2003-11 to study effects on both hours of work and household production. Labor supply effects of CLM availability tend to be positive for men and negative for women and are found for singles, cohabitants and married respondents, especially when we restrict the sample to respondents under age 36.

Some of our findings support a well-known argument based on specialization combined with traditional gender roles. In addition, the finding of positive effects of CLM on the labor supply of single young men—especially those without a college education—is compatible with a scenario of men preparing themselves to pay the price of marriage or cohabitation. When CLM was abolished it may have created some cases of “discouraged husbands” who were willing to work towards a relatively cheap CLM marriage but not towards a regular marriage. The abolition of CLM in three states may thus have contributed to the convergence in labor supply of men and women, especially among respondents without college education, whites, and Hispanics for whom CLM was more likely to reinforce traditional gender gaps in labor supply. Our marriage-market based analysis also applies to the divergent findings we obtain for black women (who work more in the labor force when CLM is available) to the extent

that black women are less likely to get paid for being household producers than is the case with white and Hispanic women.

The conceptual framework is presented next. We then present data and methods. Presentation and discussion of the results follow.

## 2. Conceptual framework

Here we derive predictions regarding effects of CLM on labor supply, home production and whether these effects are expected to vary with gender, relationship status (single, cohabiting or married), age, education, and race/ethnicity (white, black or Hispanic).

Consider heterosexual individuals who have a choice between three types of relationship status: single, cohabitation and marriage. Singles with romantic partners maintain separate residences and are not called ‘couples’. Marriage involves an implicit or explicit contract implying rights and obligations that are especially valuable in case of divorce or death and if children are present. Cohabitation involves rights and obligations that lie in between those of single and married romantic partners. In cohabitation there is limited formal asset protection for the lower earning partner in case of separation, whereas marriage guarantees each spouse close to half of all joint assets (in equitable property division states), or half of all assets acquired in marriage (in community property states). Entry into cohabitation is cheaper than entry into marriage, in part due to different social expectations.

*Relationship status and labor supply.* Married or cohabiting couples are likely to specialize, with one person doing more household production and the other more in work in the labor force. A number of theories of marriage, including Becker (1973), have emphasized the role of traditional gender roles in such specialization. Such roles may have a biological basis: given that women give birth and often breastfeed (see e.g. Alger and Cox 2013). To the extent that such traditional roles prevail we follow others in expecting that married women will work fewer hours for pay than cohabiting women (Stafford et al. 1977, El Lahga and Moreau 2007) and that women living in couple (married or cohabiting) will work less in the labor force than single women. The more legal protection they are offered for their home production, the more they will be willing to exit the labor force. Specialization and traditional gender roles also imply that men living in couple will work more in the labor force than single men. Whether married men will work more than cohabiting men is not as clear as there may be compensating differentials such that men with more income may not be as willing to agree to marry and may prefer to cohabit with fewer obligations (see Grossbard-Shechtman 1982).

## PREDICTED EFFECTS OF CLM ON LABOR SUPPLY

*CLM and relationship status based on a specialization argument.* Cohabitation often leads to marriage out of mutual consent, regardless of whether CLM is available, but in CLM states cohabitation may unilaterally lead to marriage. Therefore in CLM entering marriage can be cheaper. The potential for specialization between men and women is not as likely to be realized if costs of entry are prohibitive for a segment of the population. With cheaper entry into marriage more people will be observed as cohabiting or being married and will engage in more household production. Assuming traditional gender roles this implies that CLM encourages women’s household production and discourages their labor force participation and hours of work. Conversely, in CLM states the labor force participation of men in couples could possibly be higher and they could engage less in household production. It does not follow from this specialization argument that single men would work more in the labor force in CLM states or that single women would work less.

*CLM and relationship status based on a specialization and trade argument.* Next, we introduce marriage markets and prices, in line with some of the economic models of marriage in Becker (1973, 1981).

Accordingly, the higher the price the more the person has access to the gain from marriage.<sup>2</sup> We think in terms of the second demand and supply (D&S) model of marriage in Becker (1973) with many interrelated markets defined by personal characteristics such as education and age, each “marriage” market establishing an equilibrium “price”.<sup>3</sup> More specifically, we follow Grossbard-Shechtman (1984) in which Becker’s markets for brides and grooms are replaced with markets for *Work-In-Household (WiHo)* defined as household production work of benefit to a spouse/partner.<sup>4</sup> WiHo can include parenting work and often also benefits the self. In a heterosexual context men and women potentially supply WiHo to each other and have a demand for each other’s WiHo. There are many hedonic markets for WiHo, with prices established in each market.

If traditional gender roles are followed women do more WiHo than men and, *netto*, markets will be for women’s WiHo, with men on the demand side. Under such circumstances the price of women’s WiHo will be paid by men. They may work in the labor force so they can afford to pay for women’s WiHo and may do so prior to marriage, while single. The more men are likely to marry, the more they are likely to prepare themselves for marriage financially and work longer hours while single. The more marriage is likely for women and the more they expect to be paid for their WiHo the more women will reduce their paid labor while single.

To the extent that CLM increases the likelihood of marriage by reducing entry costs it will not only lead to higher labor supply by men in relationships (who need to pay for women’s WiHo) but also by single men preparing themselves for such relationships. Single women may have reduced labor supply where CLM is available if they anticipate having more opportunities to work in WiHo and get paid for it. It is not clear whether availability of CLM will have a stronger negative effect on married women’s labor supply than on cohabiting women’s labor supply or vice-versa. Single women’s labor supply is likely to vary less with CLM than that of women in couple.

If a group moves away from traditional gender roles and marriage markets are for men’s WiHo and women pay the price of WiHo then CLM is likely to raise men’s price in marriage markets, and to cause increases in women’s labor supply as well as decreases in men’s labor supply.

*CLM, Relationship Status and Age.* The closer people are to the average age of entry into cohabitation or marriage, the more CLM is likely to affect their labor supply. The labor supply or other outcomes of people who have been married or cohabiting for extended periods of time is not as likely to be affected by laws that make it easier to enter marriage. Therefore in the empirical work we focus on respondents under age 36. We also use samples ages 18 to 55, the ages studied in analyses of divorce laws and labor supply such as Gray (1998), even though in our analysis related to the costs and benefits of cohabitation and marriage it is not as appropriate to include individuals over age 35 as in the case of studies of the effects of divorce laws.

*CLM, Relationship Status and Education.* Where traditional gender roles prevail CLM encourages women’s WiHo. To the extent that highly educated women are less interested in supplying WiHo at a price and using that income to avoid labor force participation (see Grossbard-Shechtman and Neuman 1988) and more interested in exchanging their own WiHo for a partner’s WiHo, *CLM will have a larger negative impact on the labor supply of women with low education* than on that of women with high education. CLM is also more likely to have a positive impact on the labor supply of low-education men than on that of highly educated men.

*CLM, Relationship Status and black/white.* It is possible that black women are less likely to obtain a price for their WiHo than is the case with white women (see Goldsmith et al 2007 for evidence on racial

<sup>2</sup> This price is related to the sharing rule found in later models of marriage, such as Chiappori (1992).

<sup>3</sup> This model has been relabeled Becker’s ‘hedonic model of marriage’ in Grossbard (2010). Choo and Siow (2006) have a hedonic marriage market model inspired by Becker’s second D&S model.

<sup>4</sup> WiHo is called ‘household labor’ in Grossbard-Shechtman (1984).

discrimination in marriage markets). In fact, they may be expected to pay men to induce them to marry, as was assumed by Cherry (1998). Consequently, by making it more feasible to obtain WiHo *CLM may encourage labor force participation and lead to more hours of work among black women*, regardless of their relationship status. So while CLM may have negative effects on the labor supply of white women who get paid for their WiHo it may have positive effects on the labor supply of black women who have to pay for men's WiHo. Furthermore, CLM may discourage labor supply by black men working in WiHo. Also, blacks tend to be poorer than whites and may have had a higher tendency to select CLM where it has been available (Lind 2008).

*Additional Factors that May Matter.* When testing for labor supply effects of CLM on women, it is important to control for the level of *welfare benefits*. Under some circumstances when prices for WiHo go down women may switch from WiHo (in marriage or cohabitation) to welfare instead of from WiHo to labor supply in the labor force (see Grossbard 2005). If CLM raises marriage prospects or the benefits of cohabitation for women, increased WiHo may not have as noticeable a negative impact on women's labor supply; instead it may mean fewer women dependent on welfare. The higher the welfare benefits, the more CLM may be associated with a reduction in women's welfare exits rather than in labor supply.

*Sex ratios* are defined as number of men divided by number of women. Grossbard-Shechtman (1984) and Chiappori et al. (2002) predicted that sex ratios will be negatively associated with women's labor supply. It also follows from the same theoretical frameworks that men's labor supply will be positively associated with sex ratios. Effects of CLM could be more pronounced where sex ratios are low as long as they are not associated with a switch in the side paying the price of WiHo. If the price of WiHo is positive, then the higher the sex ratio, the higher the price of WiHo and the more CLM is likely to cause increases in men's labor supply. Women's labor supply are not as likely to vary negatively with availability of CLM and high sex ratios, as women may not want to translate their higher price into more supply of WiHo. Also the higher the sex ratio the less CLM will be associated with more household production by women.

It is expected that in *community property* states women doing WiHo get more legal protection in case of divorce or death than in states without community property and therefore will have lower labor supply while married if the prospect of higher benefits at dissolution does not imply lower payments for WiHo during the marriage. Men will have higher labor supply if they need to pay their wives and partners more for WiHo or a lower labor supply if they avoid accumulating common wealth that they will have to split 50/50 in case of divorce. If community property adds up to more benefits for women then when combined with community property CLM offers more benefits to WIH workers and we expect to find that where there is CLM and community property CLM effects on the labor supply of men and women will be larger in absolute terms.

Other variables included in the regression models are discussed in Section 4.

## PREDICTIONS ABOUT CLM AND HOUSEHOLD PRODUCTION TIME

An effect of CLM on labor supply does not necessarily imply the opposite effect on household production as measured by the ATUS. A first reason for the difference is that the predictions discussed above were based on arguments about WiHo and not all household production is WiHo: WiHo only includes production that benefits the spouse or partner and for which the partner is willing and able to pay. Unfortunately, our data don't include information on who benefited from household production time. So a prediction that CLM increases WiHo and decreases labor supply doesn't necessarily translate into increased household production as it is measured by the ATUS. For instance, the person could be spending more time in self-oriented household production when CLM is available. A second reason for the difference is that the availability of CLM may also affect the price for WiHo and the propensity to subcontract production outside the household. A third reason for the difference is that when CLM is

available the couples that are formed may be selected according to different characteristics. Low income people may be more likely to form couples given the lower costs of entry into marriage and high income people may be more reluctant to cohabit as they may worry about a poorer partner claiming some of their assets. In turn, such income effects will affect both the demand and the supply of WiHo and observed time in household production. In view of these considerations we don't have clear predictions regarding the signs of CLM and its interactions with relationship status in the household production time regression.

### 3. Data and sample means

We use two data sets in this study: micro data from CPS-iPums 1995-2011 and micro data from ATUS 2003-11.

#### CPS-iPums 1995-2011<sup>5</sup>:

This is a large nationally representative dataset with information on demographic characteristics, labor market status, and identifiable cohabiting relationships. Three states abolished CLM over the time covered by this data: Idaho (1996), Georgia (1997), and Pennsylvania (2005). The main drawback is that not all cohabiting couples can be identified prior to 2007, because only relationships between household heads and their partners were recorded, while other household members are assigned either married or single status. Therefore our sample will underestimate the share of cohabiting couples in the population for 1995- 2006. This will not be a problem, because our variable of interest is not the time trend but the difference between CLM and non-CLM states, as long as the designation of a household head and the composition of other family members do not vary systematically by CLM status.

We select all US-born men and women for we want to exclude individuals who possibly made their marriage decision in another country. Excluding non-US citizens resulted in a disproportionate loss of married women since first generation immigrants are more likely to be married and less likely to cohabit compared to the rest of the US population. This selection affected the Hispanic sample the most: it shrank by more than one-third.

When we include all those aged 18-55, the age groups selected for studies of the effects of divorce laws on labor supply such as Gray (1998), our sample includes 723,544 women and 664,819 men, of which around 20% live in CLM states. However, most of our regression analyses are for 322,865 women and 293,054 men ages 18 to 35, ages at which people are more concerned about the costs of entry into marriage or cohabitation.

According to Table 1 of sample means, CLM states have a slightly higher proportion of married and a lower proportion of cohabiting residents. Respondents from CLM states are on average slightly less educated and of lower median household income, and more likely to have children, be Hispanic, and work full time in the labor force. CLM states are more likely to be community property states, with lower welfare payments.

Figure 1 illustrates usual weekly hours of work among married, cohabiting and single men and women living in CLM and non-CLM states. This measure of usual hours is the average among employed and non-employed individuals and thus may reflect higher probability of being employed and/or longer work week among some groups. All men and women, married, cohabiting and single, who live in CLM states report longer workweeks, with the smallest difference between CLM and non-CLM states being among married women (only several minutes) and the largest difference of among cohabiting men (over 1 hour).

ATUS 2003-11<sup>6</sup>: This dataset is a time use supplement to the CPS. The survey is conducted several months after the CPS, and respondents are asked to update the main demographic, labor market and

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<sup>5</sup> <https://cps.ipums.org/cps/>

<sup>6</sup> <http://bls.gov/tus/>

family status variables. The sample size is much smaller than that of the CPS because only one household member is selected to participate, and the supplement covers a shorter number of years. The shorter time frame makes causal interpretation of our results problematic since only one state changed CLM status during the 8 years of the survey. We therefore examine correlations and interpret our results with caution.

Our sample includes 38,615 US born women and 28,865 men aged 18-55, 19% of whom live in CLM states. Many of our estimations are for 14,201 women and 10,140 men aged 18-35. Survey weights are applied in all estimations to adjust for days of the week. Comparing the ATUS sample means in Table 1 to the CPS means, one notices that ATUS respondents are more educated, about two years older, more likely to be married and less likely to cohabit. These differences are possibly the result of a higher response rate to the supplement among educated women who are also more likely to be married. The ATUS also contains a lower percent of African American women and a higher share of students. A higher proportion of ATUS respondents work full time, but the total weekly hours of work are about the same across both surveys.

Household production time includes all unpaid work: cooking, cleaning, food and non-food shopping, paying bills, care of adults, children, and pets, as well as using household and government services. Work includes paid work and income generating activities, although the latter accounts for only 2 minutes per person on average. Both household production and work include related travel and commute. Figure 2 reports minutes spent in paid and unpaid work by relationship status (married/cohabiting /single) in CLM and non-CLM states.

Married women in non-CLM states spend the most time in household production on a typical day, namely 5 hours, which is 10 minutes longer than their married counterparts in CLM states. This is about as much as men spend on average in paid work. Regardless of the state's CLM status, all married women work for pay just under 3 hours a day, which is a shorter work day than that of unmarried women. Cohabiting women in non-CLM states spend 4 hours in household production, which is 20 minutes less than cohabiting women in CLM states. Paid work differs slightly: cohabiting women in CLM states work 3 minutes longer than their counterparts in non-CLM states. Single women in CLM states spend 3 minutes less time in household production but on average work 13 minutes more for pay than single women in non-CLM states. Cohabitation increases women's involvement in household production with larger impact in CLM states.

Compared to cohabiting women in other states cohabiting women in CLM states spend more time in household production without spending less time in paid work. In contrast, cohabiting men in CLM states spend less time in household production and more time in paid work than their counterparts in other states. Interestingly, on average single men and women from CLM states work more for pay than single people in other states. The same is observed in Figure 1 based on CPS data.

#### 4. Empirical strategy

Our general empirical strategy is to estimate a series of models where  $Y$ , the outcome of interest, is a function of CLM and other determinants of a decision. Identification of a CLM effect arises through cross-state variation and variation over time, as at least one state abolished CLM over the period examined. For individual  $i$  from state  $s$  in year  $t$ , outcome  $Y$  is:

$$Y_{ist} = \alpha_1 CLM_{st} + \alpha_2 CLM * Cohabit + \alpha_3 CLM * Married + \alpha_4 Cohabit + \alpha_5 Married + \beta X_{ist} + \delta_s + \gamma_t + u_{ist} \quad (1)$$

where  $Y$  is employment status, whether the individual is employed full time (worked 35 hours or more last week), and the number of hours worked last week in either the labor force or in household production;

CLM is the indicator for whether the state of residence recognizes CLM in year  $t$ , our variable of interest;

$\delta_s$  are state fixed effects to account for unobservable differences in economic, legal, demographic and cultural environment that may affect individual choices;

$\gamma_t$  are time dummies to capture the time trend; and

$u_{ijt}$  are i.i.d. error terms.

The vector of controls  $X$  consists of:

a. Respondent's demographics. All regressions contain a quadratic function of age, student status and metropolitan residence. Regressions for the entire sample include respondent's educational level and black and Hispanic ethnicity. We also include the presence of children of preschool and school age and the number of children. CPS models include the log of unearned household income measured as the total household income minus the respondent's personal income. This variable is not included in ATUS models because of too many missing values. We also experiment with including partner's age and education in regressions for couples, but these variables do not significantly alter the results.

b. State-level time-varying characteristics. This group of variables includes sex-ratios by age which has been shown to affect labor market participation (Amuedo-Dorantes and Grossbard 2007).<sup>7</sup> We also include the log of median household income and the unemployment rate to account for the aggregate impact of the cost of living and economic environment. The share of college educated adults age 25 and older and the share of urban population in the state are included to reflect social norms and bargaining conditions affecting the market for work in household production. An indicator for a state having a community property division rule is included because divorce laws have been shown to affect bargaining power in marriage.

c. Year and state fixed effects. State fixed effects are included in CPS models to account for all other differences in the legal, cultural and economic environment that are not reflected in state time-varying controls such as laws regarding child custody and religiosity. However, our time use models do not include state fixed effects because only Pennsylvania changed CLM status between 2003-11, so it would not be possible to keep the CLM variable of interest and all state dummies. In addition, the sample size is already relatively small: several states have fewer than 100 observations. Instead of using state fixed effects, we include 3 regional dummies to account for Northeastern, Midwestern, and Western states, Southern being the reference.

The coefficients of interest are  $\alpha_1$ , the coefficient of CLM and interactions of CLM with cohabiting and married status ( $\alpha_2$  and  $\alpha_3$ ). If traditional gender roles prevail it is expected that all these coefficients in regressions of labor supply will be positive for men and negative for women. The effect of CLM on labor market outcomes for married individuals may be larger than for cohabitants and singles.

We will estimate the following model using the ATUS, which includes equation 1 and a second equation for HP, minutes of household production:

$$Work_{ist} = \alpha^{11}CLM_{st} + \alpha^{12}CLM * Cohabit + \alpha^{13}CLM * Married + \alpha^{14}Cohabit + \alpha^{15}Married + \beta_1 X_{ist} + \delta_s + \gamma_t + u_{ist} \quad (1)$$

$$HP_{ist} = \alpha^{21}CLM_{st} + \alpha^{22}CLM * Cohabit + \alpha^{23}CLM * Married + \alpha^{24}Cohabit + \alpha^{25}Married + \beta_2 X_{ist} + \delta_s + \gamma_t + u_{ist} \quad (2)$$

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<sup>7</sup>More information about the sources of data and how sex ratios are computer is in the Notes for Table 1.

The predictions regarding coefficients  $\alpha_1^1$ ,  $\alpha_2^1$  and  $\alpha_3^1$  in the first equation are as above. We don't have clear predictions regarding the sign of the coefficients  $\alpha_1^2$ ,  $\alpha_2^2$  and  $\alpha_3^2$  in equation 2.

When investigating whether changes in CLM laws help explain variation in time use we present separate results for different age groups, ethnic groups, education groups and groups differing in relationship status. One reason to separate by age is that young people are more likely to adapt to changes in law such as the abolition of CLM.

When analyzing the ATUS data we use a seemingly unrelated system of equations in line with the model in Kimmel and Connelly (2007). We use OLS regressions, in accordance with Stewart (2013).

## 5. RESULTS

Results are presented regarding the effect of CLM on labor supply based on the CPS and ATUS data. CPS data include three labor outcomes: employed, employed full time, and usual weekly hours of work. ATUS results are based on a seemingly unrelated system of equations of minutes spent in household production and paid work. We then discuss how CLM affects time in household production.

### Labor supply outcomes

We first report estimations for the entire CPS sample of native-born men and women aged 18-55. We then break down the sample by age and focus on respondents under age 36 who are more likely to be influenced by marriage market conditions than those above age 35. Given the larger size of the CPS sample we also distinguish between ages 18 to 25 and 26 to 35. In the smaller ATUS sample and for parts of the CPS-based estimations we combine all respondents ages 18 to 35.

*All respondents ages 18-55.* Our principal focus is on the coefficients of CLM (common law marriage), which is included on its own and interacted with two of the three possible living arrangements: married and (unmarried) cohabitation (relative to single). It can be seen from the first three columns in Table 2 that after control for a large number of variables and including fixed time and state effects married women work about 25 minutes less in the labor force and are less likely to be employed when CLM is available than when it is not: the coefficient of CLM\*married equals -0.39, which translates to about 25 minutes. Single women are also less likely to be employed full time, and their work week is about 30 minutes shorter when CLM is available (the coefficient of CLM equals -0.53, which corresponds to 30 minutes). No significant effects of CLM on labor outcomes are apparent for cohabiting women: the coefficient of CLM\*cohabiting is not significant.

The last three columns in Table 2 show results for men. Single men in CLM states are less likely to be employed and to be employed full-time than single men elsewhere. As for cohabiting men they are more likely to be employed full-time when CLM is available.

Table 3 presents corresponding results based on the ATUS sample for ages 18 to 55. It can be seen that according to the ATUS married women are also working fewer hours in the labor force where CLM is available. Single men and women work more hours in the labor force when CLM is available, two results that contrast with those based on the CPS reported in Table 2. Results differ across the two data sets because the CPS sample covers a period long enough to include 3 states that abolished the law. Thus the coefficient of CLM identifies the impact of this change, whereas all other state-level differences are captured by state fixed effects. In contrast, the ATUS sample covers a shorter time span: only one state abolished CLM during that period of time, so we are unable to include state fixed effects and identify the CLM dummy at the same time. As a result, the coefficient in ATUS may include other difference between CLM and non-CLM states that are correlated with CLM status within a particular region such as differences in religiosity: if CLM states tend to be more religious and religious women spend more time in household production and less time in paid work then the CLM coefficient would

confound the impact of CLM and religiosity on paid work. Also, the definition of paid work time in the CPS and the ATUS differ: the ATUS' measures of work include commuting time and income-generating activities but that is not the case with the CPS. Finally, the ATUS sample has a higher proportion of responsible and hard-working adults as evidenced by differences in education, married status and share of full-time workers.

According to our conceptual framework we need to focus on younger respondents who are more likely to be active participants in marriage markets or to have recently participated in those markets.

**Focusing on respondents under age 36.** Table 4 reports effects of CLM availability on labor outcomes of men and women based on CPS data for three age groups: ages 18 to 25, 26 to 35, and 36 to 55. Here we report only the coefficient of CLM and its interactions with relationship status (the other variables included in the regressions are the same as those in Table 2). The table shows that effects of CLM differ considerably across age groups.

*Women <36.* Single women in the youngest and oldest groups work fewer hours in the labor force when CLM is available. As for the negative effects of CLM on labor supply of married women reported for all women aged 18-55 in the CPS sample (Table 2) Table 4 reveals that they principally apply to women aged 26 to 35, when women are the most likely to be mothers of young children. Women with young children and potential mothers are most likely to be at the margin between work and no work and between marriage, cohabitation, and single status, and therefore their labor supply is most likely to be influenced by the availability of CLM. Married women 18-25 are also less likely to work full-time where CLM is available. Many cohabiting women under 35 are less likely to work full time and their work week is shorter, but none of the coefficients is statistically significant. Table 5 reports results for two age groups based on the ATUS. Here effects of CLM on young women's labor supply are not significant. Again, the small size of the ATUS, which led us to combine all respondents aged 18 to 35, helps explain why the two data sets give different results.

*Men <36.* When all men aged 18-55 were included in the CPS sample we had reported in Table 2 that where CLM is available single men were less likely to be employed. It turns out that this negative sign of CLM is dominated by that effect for men aged 36-55, who are a majority of the sample (see Table 4). For our preferred sample under age 36 there are no statistically significant effects of CLM for single men according to Table 4. Furthermore, the table reveals that for men aged 18-25 availability of CLM has a large positive impact on all labor outcomes if they are married or cohabit, which is in line with our prediction. The ATUS results in Table 5 show that for single men under age 36 availability of CLM is associated with more labor supply. None of the other CLM terms are statistically significant for that age category.

*In sum*, the results for men and women under age 36 based on the ATUS and the CPS are consistent in the sense that all statistically significant labor supply effects of CLM are negative for women and positive for men. For young women the results only hold for the CPS and for married women; for men only for single men in the case of the ATUS and only for married and cohabiting men in the CPS. The findings of negative effects of CLM on married young women's labor supply and of positive effects for young men in couple support a specialization argument combined with traditional gender roles. The finding of positive effects of CLM on the labor supply of single young men does not follow from a specialization argument. All these findings are compatible with a scenario of men paying for women's WiHo after couple formation and preparing for this while single. When a cheap marriage alternative was available it seems to have encouraged young men to enter marriage and prepare for it while single, but once that option disappeared they possibly became "discouraged husbands". Alternatively, it could be that when CLM is available some single men with girlfriends are reluctant to call themselves cohabitants and to actually cohabit due to negative financial implications of CLM. This would be more applicable to men with higher income or wealth who have more to lose from potential marriage and divorce.

Taken together these results suggest that the abolition of CLM in three states may have contributed to increases in married women's labor supply and to reductions in the labor supply by young men over the period of investigation. Does the effect of CLM apply to all respondents under age 36, or does it vary by education and ethnic group?

**CLM effects by education and ethnicity.** Results based on the CPS for respondents without a college education, by race and for ages 18 to 25 and 26 to 35, are found in Table 6. Table 7 presents results for the college-educated. Due to the smaller numbers of college-educated we combine all those aged 18-35 in Table 7. Even so, results for college-educated blacks and Hispanics are less reliable due to small sample size. We then compare the CPS findings with those based on the ATUS (Table 8). Here ethnic distinctions were not feasible.

We first look at *women without college education*. Based on the CPS when all ethnic groups are combined CLM is associated negatively with the labor supply of women without a college education who are single and under age 25 or married and aged 26-35 (Table 6). However, where CLM is available single women without college aged 26-35 are more likely to be employed. Similar findings apply to single white women. However, the negative association between CLM and labor supply is not as strong for white women aged 26-35 as it is for all women in that age group. A strong negative association between CLM and labor supply (along all dimensions of labor supply we examine) is found for married Hispanic women aged 26-35. Negative effects of CLM on hours of work in the labor force for this group are particularly large: a reduction of 2.4 weekly hours, in contrast with .68 for whites and zero for blacks in this age group. For the single Hispanic women in that age range there is also a negative association with CLM. For black women without college we only find significant associations with CLM for ages 18-25: married are less likely to be employed and cohabiting women more likely to be employed. Table 5 indicates that according to the ATUS sample no significant effects of CLM are found for women aged 18-35.

As for *men without college* we find a strong positive association between CLM and all dimensions of labor supply for men under age 26 who are either married or cohabiting (Table 6). This result is primarily reflecting the effect of availability of CLM on white men with these characteristics. However we find that men aged 26-35 who are single are less likely to be employed full time (applies to all ethnicities and to whites). CLM is also associated positively with men's labor supply for the following groups without college education and aged 18-25: cohabiting black men and single and married Hispanic men. Table 8 based on the ATUS shows that CLM has positive effects on the hours of work of single men under age 36 without a college education.

For single whites 26-35 without a college education we find that CLM is associated positively with labor supply for women and negatively for men, which is the opposite of what we find for respondents in couple. Singles in this age group may not be as marriageable as their younger counterparts who respond to CLM as predicted. They may intend to stay single and not be preparing for marriage or cohabitation. Some may follow untraditional gender roles, in part due to their being gay or lesbian.

*Women with college.* A negative association between CLM and labor supply is also found for married and cohabiting women with a college degree aged 18-35 when all ethnicities are combined and for white women (Table 7). In addition, single white women under age 36 also have a lower employment probability where CLM is available. In contrast, black single women with a college education are more likely to be employed where CLM is available. No associations between CLM and labor supply were significant for Hispanic women with college degrees and under age 36. The ATUS results for college-educated cohabiting women aged 18-35 differ from those based on the CPS: according to Table 8 they work more hours where CLM is available. The ATUS results show no significant association for single and married college-educated women in this age group.

*Men with college.* It appears from Table 7 that for college educated single white men aged 18-35 there is a positive association between CLM and labor supply. However, that association is negative for single

college-educated Hispanic men under age 36. For most college educated groups of men CLM has no effect on labor supply.

Next, we *compare these results with results that pooled all ethnicities and education levels*. For all ethnic groups and education level we saw that CLM delays convergence between the labor supply of men and women. We have now seen that this result also applies to white and Hispanic women with and without a college degree. They don't apply to black women. However, the main result for men, that CLM encourages the labor supply of young men under age 26 who are in couple, only applies to men without a college degree and was found for low-education men under age 26 belonging to all ethnic groups.

Most of the results are consistent with the conceptual framework based on WiHo markets according to which some individuals supply WiHo and others pay for it. That framework, combined with the assumptions of traditional gender roles and of CLM as an institution lowering the costs of couple formation, implied that CLM encourages more traditional division of labor, with men working more in the labor force and women working less. Abolition of CLM by some states therefore helps explain gender convergence in labor supply over time.

Our main findings apply to the analyses of both CPS and ATUS data, although the CPS results are stronger. The only ethnic group for which we don't find a negative association between women's labor supply and CLM are blacks. Instead, we find a positive association between labor supply and CLM for black women, which is consistent with less favorable marriage market conditions. If they have fewer options of making a living from supplying WiHo to men they live with, black women will find it more difficult to avoid working in the labor force. Our results for black women are also consistent with black women paying men for marriage, as suggested by Cherry (1998). This can be expressed as follows: among blacks men's WiHo may be in higher demand and women may have to work more in the labor force to afford either regular or CLM marriage. This would imply that in dating markets black women who have a higher labor supply are more likely to find a partner.

That our conceptual framework applies better to men without college could partially be due to what educated men stand to lose from CLM: if they cohabit and their female companion unilaterally transforms the cohabitation into marriage, more educated white men stand to lose more than less educated white men or minority men, for they would then have obligations to share their relatively high earnings with the women they form couples with. They may therefore prefer not to earn as much and work less in the labor force. In other words, CLM may encourage men's entry into cohabitation and marriage and the ensuing labor supply needed to afford WiHo more if men own fewer assets and have less human capital.

## Household production

Here we can only use the ATUS. When all respondents aged 18 to 55 are included (Table 3) it can be seen that women who cohabit outside marriage perform more household production when CLM is available, more precisely 23 minutes a day longer. This result also holds for women under age 35, but not for women 35 to 55 (see Table 5). However, we also find that for young single women CLM is associated with less household production.

As for men, where CLM is available they work less in household production when married (Tables 3 and 5) but single and cohabiting men's time in household production does not vary with CLM. When the ATUS sample is separated by college education the only significant effect of CLM is a positive effect on the household production of cohabiting women with low education. Educated women's household production time does not respond to CLM.

The result of increased household production by cohabiting women and decreased household production by married men make sense in terms of a specialization argument. In this case the effect of CLM on household production is the mirror image of its effect on labor supply. That the production time of women with low education responds more to availability of CLM than that of college-educated

women also makes sense to the extent that WiHo is a more important source of income for low-education women than for their educated counterparts. In part, this could be the result of a movement towards a more egalitarian division of labor among more educated Americans (ref).

## 6. Conclusions

This paper examined whether the availability of Common-Law Marriage (CLM) helps explain variation in the labor supply of men and women in the U.S. Our conceptual framework led us to expect that where traditional gender roles prevail CLM would be associated with less labor supply by women and more labor supply by men. This could hold for singles as well as for people who live with a partner or spouse and would be most relevant to people at the stage of couple formation, namely younger people. An analysis of the CPS and the ATUS for respondents under age 36 revealed that most labor supply effects of CLM availability are positive for men and negative for women. CLM affected the labor supply not only of cohabitants and married respondents, but also of singles, which supports our preferred framework based on the concept of trade between money and Work-In-Marriage (WiHo) within couples. In particular, the finding of positive effects of CLM on the labor supply of single young men is compatible with a scenario of men preparing for marriage by acquiring the wealth needed to pay for a woman's WiHo defined as household production benefiting a spouse. When a cheap marriage alternative was available before some states abolished CLM it seems to have encouraged young men to enter marriage and prepare for it, but once that option disappeared they may have become "discouraged husbands". As expected we found this scenario to fit young men without a college degree more than those who finished college.

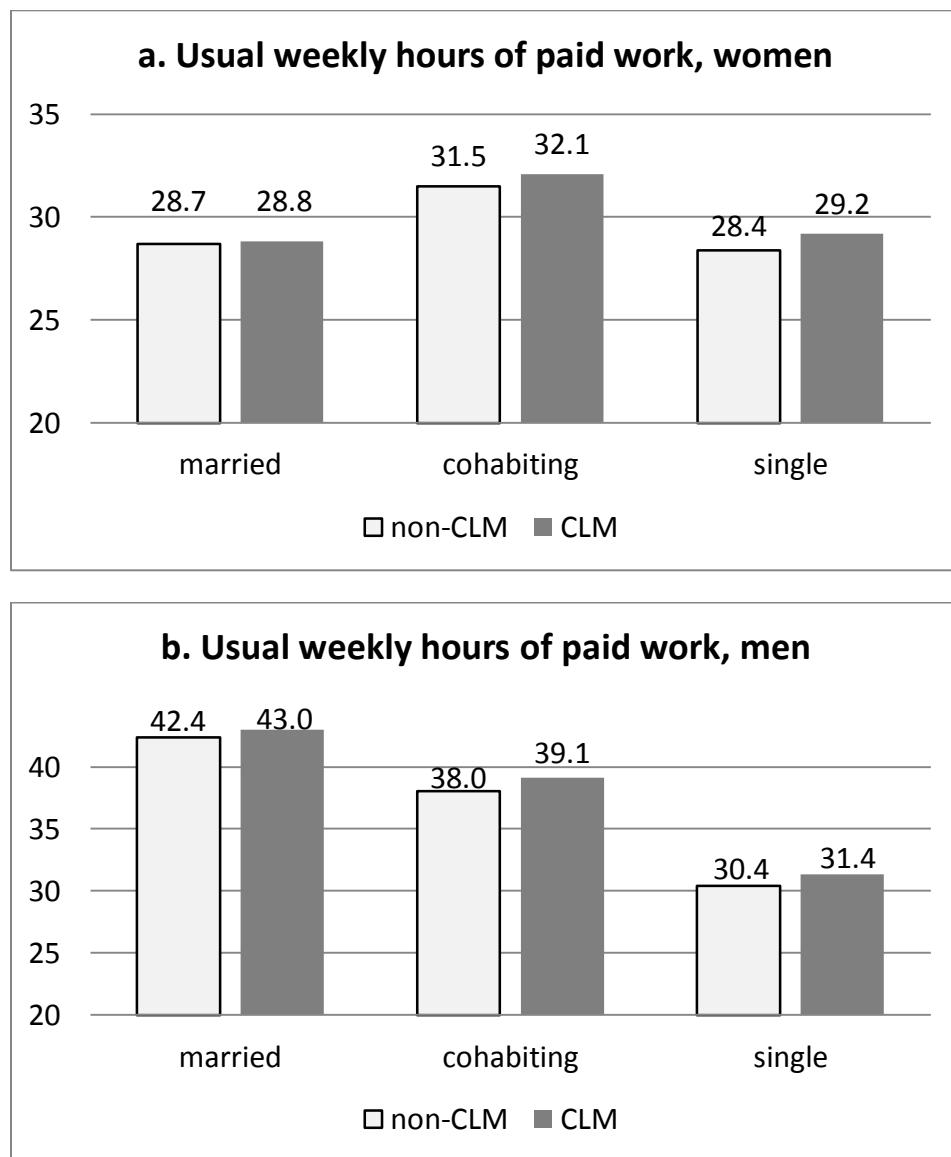
The abolition of CLM in three states may have been a cause of reduced labor supply by young men and increased married women's labor supply. In that sense it could have contributed to the convergence in labor supply of men and women, especially among respondents without college education, whites, and Hispanics for whom CLM was more likely to reinforce traditional gender gaps in labor supply. Our marriage-market based analysis also applies to our findings for black women (who work more in the labor force when CLM is available) to the extent that black women are more likely to pay men for their WiHo than is the case with white and Hispanic women.

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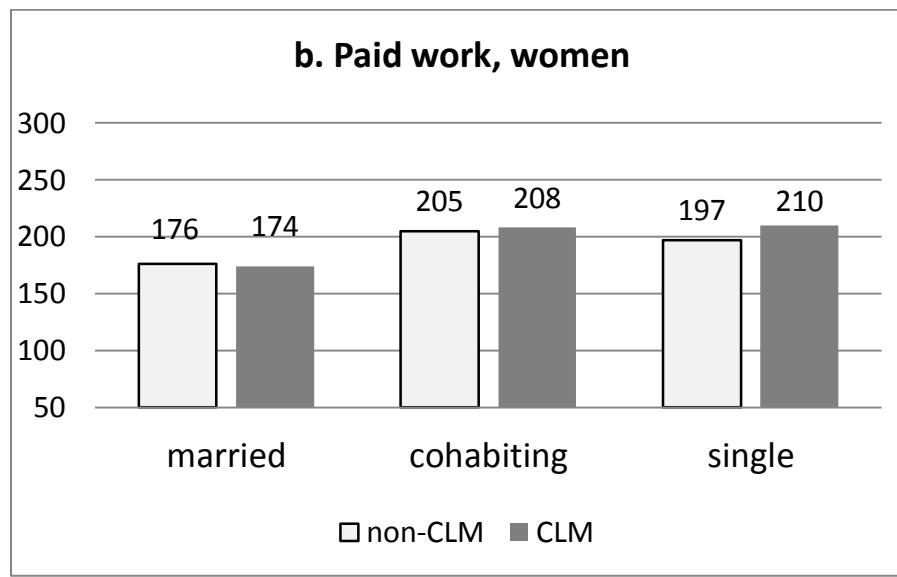
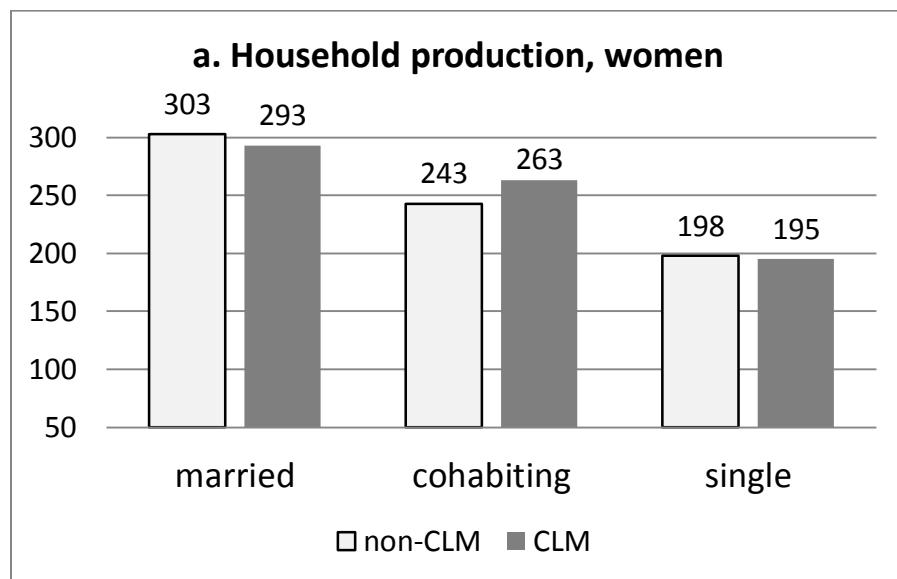
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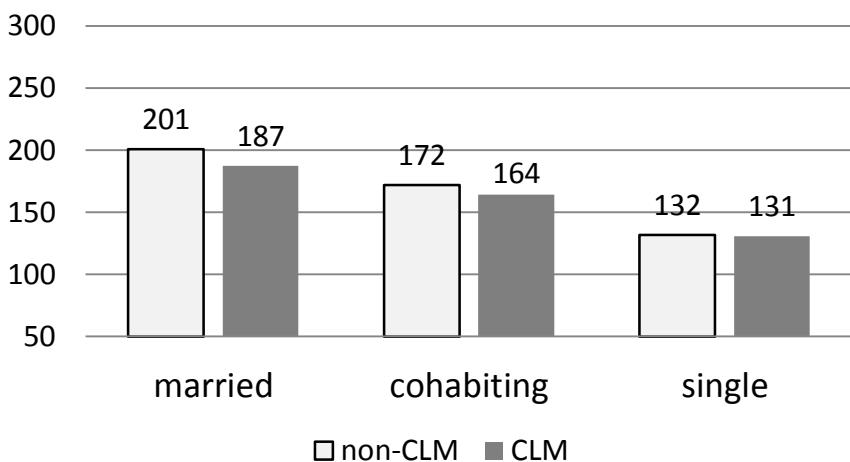
**Figure 1. Usual Weekly Hours of Paid Work for Women and Men by Presence of CLM and Type of Living Arrangement. US-born individuals ages 18-55, CPS 1995-2011.**



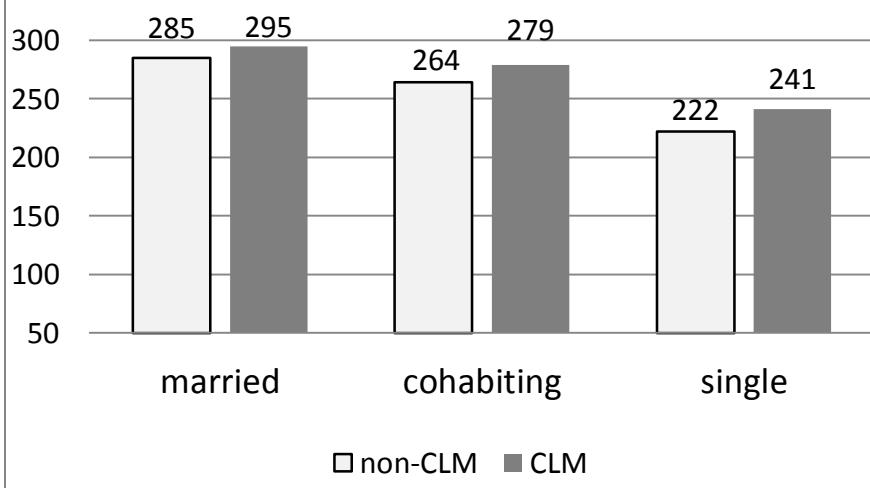
**Figure 2. Daily Minutes in Household Production and Paid Work for Women and Men by Presence of CLM and Type of Living Arrangement. US-born individuals ages 18-55, ATUS 2003-2011.**



### c. Household production, men



### d. Paid work, men



**Table 1. Sample means. CPS 1995-2011 and ATUS 2003-11. US born women and men age 18-55.**

	WOMEN				MEN			
	CPS, CLM 21.1%		ATUS, CLM 18.8%		CPS, CLM 21.0%		ATUS, CLM 19.0%	
	non-CLM	CLM	non-CLM	CLM	non-CLM	CLM	non-CLM	CLM
<i>Individual characteristics</i>								
Married	0.531	0.559	0.595	0.620	0.507	0.537	0.576	0.604
Cohabiting	0.065	0.053	0.051	0.041	0.066	0.054	0.055	0.043
Age	36.6	36.4	39.0	38.8	36.5	36.3	38.7	38.0
Age 18-25	0.207	0.211			0.213	0.214		
Age 26-35	0.252	0.260			0.252	0.260		
Age 36-55	0.542	0.529	0.637	0.614	0.535	0.526	0.675	0.635
No high school diploma	0.093	0.108	0.061	0.069	0.112	0.124	0.073	0.084
Some college	0.335	0.326	0.329	0.331	0.300	0.298	0.310	0.301
College degree	0.189	0.184	0.237	0.245	0.177	0.174	0.221	0.219
Graduate degree	0.078	0.064	0.114	0.091	0.077	0.072	0.107	0.096
Black	0.145	0.14	0.101	0.098	0.124	0.121	0.076	0.078
Hispanic	0.06	0.109	0.056	0.115	0.064	0.108	0.055	0.103
Other race	0.01	0.01	0.032	0.026	0.011	0.011	0.035	0.031
Employed	0.718	0.718	0.755	0.755	0.803	0.823	0.850	0.867
Full time employed	0.532	0.541	0.552	0.561	0.717	0.742	0.767	0.789
Usual hours of work	28.7	29.1	28.1	28.5	37.0	38.0	37.7	39.3
Presence of children	0.523	0.541	0.521	0.532	0.398	0.418	0.462	0.484
Student	0.087	0.082	0.109	0.102	0.083	0.081	0.087	0.094
Metropolitan residence	0.238	0.239	0.67	0.61	0.233	0.236	0.679	0.595
<i>State characteristics</i>								
Community property	0.240	0.345	0.229	0.353	0.247	0.342	0.234	0.330
Sex ratio	0.962	0.963	0.958	0.957	0.970	0.970	0.967	0.968
College educated adults	25.8	24.5	27.3	26.3	25.8	24.6	27.3	26.5
Unemployment rate	5.9	5.4	6.7	5.9	5.9	5.4	6.7	6.0
Median household income	52043	49110	51908	49307	52111	49204	51908	49572
Welfare	707	613	690	609	709	615	693	616
Urban population share	79.0	75.1	79.2	76.0	79.1	75.1	79.2	76.0
Northeast			0.19	0.11			0.20	0.11
Midwest			0.31	0.13			0.30	0.14
West			0.21	0.17			0.22	0.19
<i>N</i>	551,273	172,271	30,780	7,835	506,992	157,827	24,255	6,190

Notes: Shares of college-educated adults are obtained from

<http://www.census.gov/hhes/socdemo/education/data/census/index.html>. Population is from the Census website, various pages, for example 2010-11 numbers can be found at

<http://www.census.gov/popest/data/state/totals/2011/index.html>. Median household income is in Table H-8 at <http://www.census.gov/hhes/www/income/data/historical/household/>. Shares of urban population are from Iowa Community Indicators program <http://www.icip.iastate.edu/tables/population/urban-pct-states>.

We adjust nominal values to 2010 prices using Consumer Price Index from

<ftp://ftp.bls.gov/pub/special.requests/cpi/cpiai.txt>. Unemployment rates are annual averages by state obtained

from BLS (<http://www.bls.gov/data/>). Sex ratios are calculated from Census 1990, 2000 and American Community Surveys 2004-6 by dividing the number of men in each 5-year age group by the number of women who are 2 years younger. For example, in order to get a sex ratio for women aged 30-35, we divide the number of men aged 32-37 by the number of women aged 30-35. “Welfare” is the maximum TANF+SNAP benefits for a family of two, in 2010 dollars obtained from the University of Kentucky Center for Poverty Research

<http://www.ukcpr.org/AvailableData.aspx>

**Table 2. Employment and labor supply regression coefficients, CPS 1995-2011. Full set of controls.**

Full sample estimates	WOMEN, N=723,544			MEN, N=664,819		
	probit employed	probit full-time	OLS hours/week	probit employed	probit full-time	OLS hours/week
<i>Individual characteristics</i>	1	2	3	4	5	6
<b>CLM</b>	<b>0</b>	<b>-0.02**</b>	<b>-0.53**</b>	<b>-0.02***</b>	<b>-0.01**</b>	<b>-0.32</b>
<b>CLM* Married</b>	<b>-0.01***</b>	<b>-0.01</b>	<b>-0.39**</b>	<b>0</b>	<b>0</b>	<b>-0.19</b>
<b>CLM* Cohabiting</b>	<b>-0.01</b>	<b>0</b>	<b>-0.15</b>	<b>0.01</b>	<b>0.01*</b>	<b>0.13</b>
Married	0	-0.01*	-0.28***	0.13***	0.20***	7.06***
Cohabiting	0.03***	0.06***	2.57***	0.07***	0.11***	5.79***
Age	0.01***	0.03***	0.91***	0.01***	0.02***	0.68***
Age-squared	-0.02***	-0.04***	-1.25***	-0.01***	-0.03***	-1.00***
No high school	-0.20***	-0.22***	-8.62***	-0.14***	-0.19***	-7.56***
Some college	0.07***	0.06***	2.74***	0.04***	0.04***	2.24***
College degree	0.12***	0.13***	5.77***	0.09***	0.11***	5.50***
Graduate degree	0.17***	0.20***	9.79***	0.11***	0.13***	7.74***
Black	-0.03***	0.03***	-0.52***	-0.11***	-0.11***	-5.79***
Hispanic	0	0.04***	0.45***	-0.02***	-0.01***	-1.68***
Other race	-0.08***	-0.03***	-2.38***	-0.12***	-0.12***	-5.72***
Metropolitan status	-0.02***	0	-0.50***	-0.01***	-0.02***	-0.93***
Student	-0.19***	-0.40***	-12.63***	-0.21***	-0.46***	-15.06***
Unearned income	-0.00***	-0.01***	-0.27***	-0.00***	-0.01***	-0.34***
Presence of kids <6	-0.12***	-0.14***	-5.68***	0.01***	0	-0.08
Presence of kids <18	0.02***	-0.02***	0.03	0.03***	0.03***	1.00***
Number of children	-0.03***	-0.05***	-1.60***	0.01***	0.01***	0.57***
<i>State characteristics</i>						
Community property	0.05***	-0.01	3.94***	0	-0.03**	-0.83*
Sex ratio	0.01	0.05**	1.53*	0.02	0.04**	1.63**
College educated adults	0	0	0.08	0	0	-0.06
Unemployment rate	-0.00***	-0.01***	-0.26***	-0.01***	-0.01***	-0.58***
Log median state income	0.04**	0.04**	2.24***	0.06***	0.08***	3.26***
Welfare	-0.01	-0.03***	-1.14***	-0.01*	-0.01	-0.77**
Urban population share	0	-0.00**	-0.09**	-0.00**	0	0
<i>State dummies</i>	yes	yes	yes	yes	yes	yes
<i>Time dummies</i>	yes	yes	yes	yes	yes	yes
R-squared			0.14			0.24

Note: The table shows marginal effects from probit regressions and OLS coefficients. Here and in the rest of the paper significance is marked as follows: \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

**Table 3. Household production and paid work regressions. US born women & men age 18-55, ATUS 2003-2011. Full set of controls.**

	WOMEN		MEN	
	h.prod.	work	h.prod.	work
<i>Individual characteristics</i>				
CLM	<b>-6.28</b>	<b>15.19***</b>	<b>5.84</b>	<b>18.70***</b>
CLM *Married	<b>-2.48</b>	<b>-16.99***</b>	<b>-15.44***</b>	<b>-11.37</b>
CLM * Cohabiting	<b>22.68*</b>	<b>-16.86</b>	<b>-1.5</b>	<b>-16.89</b>
Married	48.86***	-26.97***	21.68***	42.37***
Cohabiting	27.89***	0.04	20.01***	31.88***
Number of children	25.14***	-16.66***	7.57***	0.52
Presence of kids <6	112.60***	-35.35***	63.53***	-12.24*
Presence of kids <18	31.15***	-4.54	13.36***	-4.91
Age	7.06***	8.13***	6.76***	9.55***
Age-sq	-6.25***	-11.52***	-6.96***	-13.26***
No high school diploma	-6.5	-60.84***	1.83	-57.10***
Some college	1.06	15.43***	7.48***	11.15***
College degree	0.14	25.66***	10.03***	24.76***
Graduate degree	-2.92	46.15***	5.37	28.66***
Black	-52.77***	1.29	-29.67***	-41.70***
Hispanic	-11.77***	9.06*	-3.99	-4.14
Other race	-0.09	-3.73	0.92	-25.35***
Metropolitan residence	-2.42	-1.55	-1.44	-2.04
Student	-24.71***	-45.22***	-16.55***	-75.25***
Summer	0.38	-11.28***	4.21*	-1.47
Friday	0.26	-24.04***	5.62	-20.33***
Saturday	63.12***	-221.77***	91.91***	-284.59***
Sunday	29.51***	-241.67***	71.78***	-325.83***
Holiday	18.71***	-265.62***	58.49***	-341.20***
<i>State characteristics &amp; time dummies</i>				
Community property	-3.79	1.64	0.77	-5.82
Sex ratio	6.16	-33.96	2.94	-74.75*
College educated adults	-0.56	0.41	0.38	-0.99
Unemployment rate	-2.22**	-1.79	1.42	-5.15***
Log median state income	-15.21	19.63	29.70*	3.97
Welfare	8.02	-15.03	7.81	5.41
Urban population share	0.34***	-0.15	-0.28**	0.16
Northeast	10.16***	-1.63	1.8	-9.20*
Midwest	-3.23	21.25***	8.01**	-4.05
West	2.09	3.43	-2.56	6.24
year== 2004	-0.87	4.84	0.37	-7.41
year== 2005	-5.59	3.02	4.54	-4.83
year== 2006	-6.87	4.41	-7.34	-2.3
year== 2007	-19.38***	16.81***	2.8	-2.42
year== 2008	-13.16***	9.15	-6.86	5.27
year== 2009	-5.39	2.01	-10.81*	3.37
year== 2010	-17.67***	14.89**	-6.36	5.01
year== 2011	-12.77**	7.54	-5.23	7.34
N	38,615	38,615	30,445	30,445

Notes: Dependent variables are daily minutes spent in household production and paid work. Survey weights are applied to account evenly for all days of the week.

**Table 4. Coefficients on the variables of interest, regressions by age, CPS 1995-2011.**

	WOMEN			MEN		
	employed probit	full-time emp probit	weekly hours of work OLS	employed probit	full-time emp probit	weekly hours of work OLS
	1	2	3	4	5	6
<i>age 18-25</i>						
CLM	-0.03	-0.02	-0.86	-0.02	0.01	0.17
CLM* Married	-0.01	-0.02*	-0.35	0.06***	0.05***	0.64*
CLM*Cohabiting	-0.01	-0.01	-0.22	0.05***	0.06***	1.11**
<i>N</i>	<i>139,225</i>			<i>130,879</i>		
<i>age 26-35</i>						
CLM	0.01	-0.01	0.16	-0.01	-0.02	0.05
CLM* Married	-0.02***	-0.02***	-1.05***	0	0	-0.28
CLM*Cohabiting	-0.02	-0.01	-0.61	-0.01	-0.01	-0.05
<i>N</i>	<i>183,633</i>			<i>162,166</i>		
<i>age 36-55</i>						
CLM	0	-0.01	-0.63*	-0.02***	-0.01*	-0.54**
CLM* Married	-0.01**	0	-0.23	0	0	-0.25
CLM*Cohabiting	0	0.01	0.25	0	0.01	-0.24
<i>N</i>	<i>400,686</i>			<i>371,774</i>		

**Table 5. Coefficients on the variables of interest, regressions by age, ATUS 2003-2011.**

	WOMEN		MEN	
	household production	work	household production	work
<i>age &lt; 35</i>	<i>N=14,201</i>		<i>N=10,140</i>	
CLM	-11.05*	8.03	7.72	15.87*
CLM *Married	-1.19	-8.38	-25.97***	-12.98
CLM *Cohabiting	31.05**	17.39	-13	-29.52
<i>age&gt;=35</i>	<i>N=24,414</i>		<i>N=20,305</i>	
CLM	-0.65	20.85***	0.11	23.62**
CLM *Married	-5.9	-24.51***	-6.92	-13.86
CLM *Cohabiting	12.68	-56.90**	17.16	-11.56

**Table 6. Coefficients on the variables of interest, respondents with no college degree, by age and race, CPS 1995-2011.**

	WOMEN			MEN		
	employed probit	full-time emp probit	weekly hours of work OLS	employed probit	full-time emp probit	weekly hours of work OLS
<i>NO COLLEGE</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
<i>ALL ETHNICITIES</i>						
<i>Age 18-25</i>						
CLM	-0.03	-0.02	-1.24**	-0.02	0	-0.04
CLM* Married	-0.01	-0.01	-0.33	0.06***	0.05***	0.67*
CLM*Cohabiting	-0.01	-0.01	0	0.05***	0.06***	1.12**
N		123,883			120,506	
<i>Age 26-35</i>						
CLM	0.03**	0	0.76	-0.01	-0.03*	-0.18
CLM* Married	-0.02**	-0.01	-0.86***	0.01	0.01	-0.24
CLM*Cohabiting	-0.02	0	-0.25	-0.01	-0.01	0.08
N		126,376			116,378	
<i>BLACK</i>						
<i>Age 18-25</i>						
CLM	0.05	0.03	0.14	-0.06	-0.03	-0.96
CLM* Married	-0.07*	-0.04	0.16	0.04	0.05	1.23
CLM*Cohabiting	0.05	0.06	2.76**	0.13**	0.09**	1.47
N		17,968			15,034	
<i>Age 26-35</i>						
CLM	0.03	-0.01	0.47	-0.03	0	1.32
CLM* Married	-0.01	0	-0.79	-0.02	-0.03	-1.1
CLM*Cohabiting	-0.01	0	-0.34	0.01	0.01	0.47
N		18,932			13,618	
<i>HISPANIC</i>						
<i>Age 18-25</i>						
CLM	-0.04	-0.04	-2.14	-0.03	-0.02	4.51**
CLM*Married	-0.01	-0.02	-1.02	0.06**	0.03	-0.83
CLM*Cohabiting	-0.01	-0.02	-1.45	0.06	0.01	0.17
N		17,746			16,895	
<i>Age 26-35</i>						
CLM	0	-0.08	-5.36**	-0.04	-0.05	0.94
CLM* Married	-0.04*	-0.07***	-2.38***	0.02	0.03	0.88
CLM*Cohabiting	-0.03	0.03	0.44	0.01	-0.01	-1.42
N		15,268			13,876	
<i>WHITE</i>						
<i>Age 18-25</i>						
CLM	-0.05**	-0.04**	-1.51**	-0.02	0.01	-0.08
CLM* Married	0.01	-0.01	-0.21	0.06***	0.06***	1.12***
CLM*Cohabiting	-0.01	-0.01	0.02	0.04*	0.07***	1.37***
N		82,179			82,487	
<i>Age 26-35</i>						
CLM	0.04*	0.01	1.18	-0.01	-0.03*	-0.51
CLM* Married	-0.02	-0.01	-0.68*	0.01	0.01	-0.31
CLM*Cohabiting	-0.02	-0.01	-0.18	-0.01	-0.01	0.18
Observations		87,637			84,562	

**Table 7. Coefficients on the variables of interest, respondents with college degree age 18-35, by race, CPS 1995-2011.**

COLLEGE	WOMEN			MEN		
	employed probit	full-time emp probit	weekly hours of work OLS	employed probit	full-time emp probit	weekly hours of work OLS
<i>ALL ETHNICITIES</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
CLM	-0.01	-0.01	-0.34	0.01	0	0.62
CLM* Married	-0.02***	-0.04***	-1.04***	-0.01	0	-0.15
CLM*Cohabiting	-0.01	-0.04**	-1.56***	-0.02	-0.01	-0.32
N		72,599			56,161	
<i>BLACK</i>						
CLM	0.05*	0.01	-1.88	-0.02	-0.03	-1.32
CLM* Married	-0.03	-0.03	0.91	-0.05	-0.06	-1.32
CLM*Cohabiting	0	0	0.22	-0.01	-0.01	2.58
N		6,114			3,439	
<i>HISPANIC</i>						
CLM	0.07	0.02	3.78	-0.03	-0.28***	-6.99**
CLM* Married	-0.03	-0.03	-0.63	0.01	0.04	1.23
CLM*Cohabiting	0.02	-0.07	-1.1	-0.01	-0.01	-2.12
N		4,642			3,284	
<i>WHITE</i>						
CLM	-0.03**	-0.02	-0.42	0.01	0	1.03*
CLM* Married	-0.02	-0.03**	-1.11**	-0.01	0	-0.28
CLM*Cohabiting	-0.01	-0.04*	-1.67***	-0.02	-0.01	-0.57
N		58,804			46,894	

**Table 8. Coefficients on the variables of interest, regressions by education and age, ATUS 2003-2011, age 18 to 35.**

	WOMEN		MEN	
	household production	work	household production	work
<i>NO COLLEGE</i>		<i>N=9,949</i>	<i>N=7,347</i>	
CLM	-13.99**	6.42	4.06	16.44*
CLM *Married	-0.63	-7.81	-23.24**	-13.27
CLM *Cohabiting	34.81*	2.18	-2.12	-39.51
<i>COLLEGE</i>		<i>N=4,252</i>	<i>N=2,793</i>	
CLM	-9.46	21.71	25.05**	20.49
CLM *Married	-0.28	-21.76	-37.93**	-20.98
CLM *Cohabiting	18.1	64.22*	-55.92*	25.48