Property Division upon Divorce and Household Decisions*

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Abstract

Marriage laws that regulate the division of property upon divorce are crucial for household decisions within marriage. In recent decades, the regulation of marital property division upon divorce in developed countries has generally shifted from a title-based regime to equitable distribution, with the goal of promoting spousal equity. In contrast, a 2011 Supreme Court decision in China effectively changed the law governing premarital housing property division upon divorce, from an equal-division regime to one based on title. To understand the influence of property division laws on family behavior, we examine the consequences of this legal change. We focus on several outcomes, which reflect changes in intrahousehold bargaining power and affect consumption and leisure allocations between spouses as well as investment in children. We analyze families in which the home is registered under the husband's name only. We exploit a difference-in-differences design based on the fact that only families in which the home was bought by the groom before marriage were affected by the new court ruling. We find that this change weakened wives' intrahousehold bargaining power in those families, leading to (a) reductions in their leisure, (b) increases in consumption of goods favored by their husbands (e.g., alcohol), and (c) reduced investment in children.

Key words: Marital property law; Household behavior; Intrahousehold bargaining power; Intergenerational investment

JEL Codes: D10; D13; D15; K11

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1 Introduction

The property division laws that govern property rights upon divorce are crucial for spouses' relative bargaining positions and ultimately affect a household's decisions during marriage. A growing literature examines the impact of laws that regulate the grounds for divorce and property division upon divorce in the U.S. Prominent examples include Gray (1998), Stevenson (2008), Chiappori et al. (2002), and Voena (2015). Most of the reforms of these laws in the U.S. during the 1960s and 1980s involved changes in the grounds for divorce (from mutual consent to unilateral). Much less common were independent changes to laws regulating property division upon divorce. These often involved switches from a title-based regime to equitable division. Changes to either grounds for divorce or property division upon divorce can lead to large changes in the bargaining power of spouses within a marriage and, in turn, resulting in changes in intrahousehold allocations. The spouse with reduced bargaining power must often agree to reductions in his or her private consumption, leisure, and preferred investments. This change in spousal bargaining power can have impacts on offspring. For example, researchers have found that policies that change spouses' relative bargaining positions—and, in particular, strengthen the woman's position—could also have a positive impact on children (Duflo, 2003; Lundberg et al., 1997; Rubalcava et al., 2009; Thomas, 1990).

Most of the literature on this topic has examined the effects of the introduction of unilateral divorce and how this interacts (if at all) with existing cross-sectional variation in the property division regime (Gray, 1998; Stevenson, 2008). Much less common is the examination of the effects of changes in property division upon divorce, while keeping fixed the rules that govern the grounds for divorce. Along with Voena (2015), our paper contributes to filling this gap in the literature. Unlike Voena (2015), who exploits changes from title-based to equitable distribution in both mutual-consent and unilateral divorce regimes, we examine the impact of a unique legal change in China that essentially changed property division laws for premarital assets in the opposite direction, going from an equal-division to a title-based regime. Importantly, we examine this alteration to the regulation of property division upon divorce in a context in which possible legal grounds for divorce

remain stable and characterized by a quasi-unilateral divorce regime in which either spouse can initiate and be granted a divorce by simply claiming lack of mutual affection after a two-year separation period.

The literature on the impact of marriage property laws on family behavior has primarily focused on the variations that stem from changes from a title-based to an equitable-division regime. The 2011 decision, which stipulated that a home purchased prior to marriage would be deemed the personal property of the registered owner, rather than the joint property of the couple, offers a unique context for study of this phenomenon. Before this change in the law, housing property was divided equally upon divorce, regardless of whose name was on the title and regardless of the timing of purchase relative to marriage. In particular, before 2011 even *premarital* housing assets brought into marriage by one of the spouses (often the husband) were divided equally upon divorce. Coupled with the quasi-unilateral divorce regime present in China throughout the period we study, this judicial decision effectively generated a large shock to the relative bargaining positions of both spouses. Figure 1 presents a graphical depiction of how divorce regimes have changed due to the 2011 Supreme Court decision in China, compared with well-documented reforms in the U.S.

In China, it is now common to buy a home when a couple marries. About 90 percent of the married couples in our data were homeowners by 2010—i.e., before the new interpretation of the Marriage Law went into effect. Based on social norms and marriage customs, the burden of purchasing the home usually falls on the groom's family.[1] As a result, it is not uncommon for the home in which the spouses live to be purchased prior to marriage, and titled solely under the soon-to-be husband's name. In a very small minority of cases, the home is registered solely in the wife's name. This was not usually consequential before 2011, as the de facto equal-division regime guaranteed a 50-50 split upon divorce regardless of who purchased the home, whether the home was purchased before or after marriage, and whose name was on the title. This paper explores the effects

[1]Wei and Zhang (2011) and Wei et al. (2017) document the increasing importance of housing assets for prospective-groom status and marriage formation in China and how the marriage market ultimately affects the housing market.

of the 2011 Supreme Court decision and provides evidence on its implications for Chinese families, in terms of intrahousehold allocation outcomes, including work, consumption, and investment in children.

We examine the implications of the legal change using data from three waves of the China Family Panel Studies (CFPS). The first wave of data collection was conducted in 2010, just before the Supreme Court decision in 2011. The second and third waves of CFPS were collected shortly after that, in 2012 and 2014. The CFPS offers uniquely rich data on home ownership and the time of home purchase. Using information on home ownership in 2010 and the timing of purchase relative to the timing of marriage, we can exactly identify, for each married couple, which spouse stands to gain and which to lose from the new interpretation of the Chinese Marriage Law. The CFPS also provides comprehensive longitudinal data on employment, consumption, and intergenerational investments, which enable us to examine changes in household behavior in different families before and after 2011.

Our empirical strategy compares the behavior of two groups of families before and after 2011 in a difference-in-differences design. We focus on couples who married and purchased their marital home (either before or after marriage) prior to the Supreme Court decision in 2011, and remained married throughout the years of analysis. Specifically, families with the husband's name on the title are categorized into two groups, depending on how the time of purchase compares with the time of marriage. We compare changes in behavior before and after 2011 between two types of families that differ with regard to the timing of home purchase. Our estimates can be interpreted as treatment effects on families in which the husband acquired the home before marriage and are therefore affected by the Supreme Court's new interpretation of marriage law and property division upon divorce. On one hand, we have families that purchased the home after marriage; these are families in which the couples are unaffected by the 2011 judicial ruling. On the other hand, we have families in which the home was purchased by the groom (or by his parents on his behalf) before marriage. It is only in these latter families that the husband benefits from a strengthened bargaining position after 2011.

To interpret our findings, we test for common trends in outcomes between the two types of families in periods leading up to the legal change. To that end, we inspect household behavior in the two types of families before 2011 using a CFPS pilot survey and a pilot follow-up survey in 2008 and 2009, respectively. We find that before the 2011 Supreme Court decision, household behavior and decisions across both types of families follow the same time trend.

Our results show that there are statistically significant responses by affected households as a result of the transition to a title-based regime. We find effects on several outcomes, including employment, consumption, and investment in children. First, the new understanding regarding property division upon divorce leads to an increase in employment probability of 3 percentage points for wives and a decrease of 3 percentage points for husbands in families in which the property was purchased by the groom before marriage. Second, husbands increase alcohol consumption in those families. Third, the data suggest that the impact of the Supreme Court decision is passed on to the next generation, because affected families invest less in children's education.

A burgeoning literature examines the impact of reforms in laws that regulate the grounds for divorce and property division upon divorce on household behavior. Most of these studies focus on the impact of reforms of laws that regulate the grounds for divorce. Wolfers (2006) argues that unilateral divorce reforms that no longer require mutual consent for divorce produced a short-lived increase in divorce rates, but ultimately led to a slight decline in divorce rates in the long run, possibly by changing the composition of marriages.[2] Stevenson and Wolfers (2006) find that the same reform is linked to a decline in female suicide rates and fewer cases of domestic violence. Gruber (2004) finds that children exposed to unilateral divorce while growing up had worse outcomes later in life.

Closer to our contribution, a more limited but growing literature examines how property division laws affect the outside opportunities of each spouse, spousal bargaining

[2]See also Mechoulan (2006) for the effects of unilateral divorce on divorce in the U.S. Work outside the U.S. includes Gonzalez and Viitanen (2009), who exploit cross-country variation in European countries, and Aguirre (2019), who evaluates the effects of unilateral divorce in Mexico.

positions, within-marriage allocation of resources, and child outcomes (Chiappori et al., 2002; Gray, 1998; Stevenson, 2008; Voena, 2015). By exploiting variations in the timing of reforms across states in the U.S. during the 1970s, Stevenson (2008) finds that unilateral divorce leads to an increase in married women's labor supply regardless of the underlying property division regime. Voena (2015) finds that under the equitable division of marital property, a move from mutual consent to unilateral divorce is associated with lower labor market participation for married women.

Another strand of the literature examines whether policy changes that affect spouses' relative bargaining positions can have a substantial effect on children's education investment (Duflo, 2003; Lundberg et al., 1997; Thomas, 1990, 1994). In particular, changes that strengthen a wife's bargaining position or allow her to control a larger share of resources are often thought to have a positive effect on various measures of child health and well-being. An emerging literature that employs structural approaches explores the link between divorce law and child development. For example, Gayle et al. (2017) investigate divorce law within a dynastic model and report that a switch to an equitable distribution regime led to an increase in maternal time with children. Brown et al. (2015) study the role of family law—in particular, grounds for divorce—in a model of parental investment in children.

Finally, our results are consistent and closely aligned with work by Wang (2014), who exploits a reform in China that gave some public employees the opportunity to purchase the homes they had been renting. In that case, property rights were defined at the individual, instead of the household, level. In some cases, therefore, the right was given to the wife and in other cases to the husband, depending on who was the public employee. Similar to our findings, Wang (2014) shows that various intrahousehold decisions evolve in ways that favor the spouse who becomes the property owner, whose bargaining position is much strengthened by the reform.[3]

This paper makes three contributions. First, we broaden the literature to include a

[3]Similarly, recent work by Gousse and Leturcq (2019) uses province-level variation in Canada and finds that a cohabiting woman's labor supply is reduced when she becomes eligible for a more protective cohabiting legal regime.

non-U.S. setting. Chinese couples have unique customs and abide by particular social norms, but the same economic insights are in play when analyzing the effects of legal changes that affect property division upon divorce.

Second, we explore a legal change that transitions across regimes in the opposite direction, relative to the previous literature; specifically, the 2011 Supreme Court decision in China changes the division of premarital property upon divorce from an equal-division regime to a title-based regime (Figure 1). This is important, because pre-reform marriage formation could be different under (a) an equal-division baseline regime like the one in China or (b) a title-based regime like the one prevalent in the U.S. for division of premarital housing assets upon divorce.

Third, and perhaps most importantly, we use information on the names listed on the property title and the timing of the property purchase to exactly identify the families in which the wife stands to lose from the Court's new interpretation, because only their husband's name was on the title and the home was purchased before marriage. Most work based on U.S. reforms does not observe whose name is on the title, and as a result cannot directly infer which spouse stands to lose or gain from changes in rules regulating property division upon divorce. It is commonly assumed that most households' marital property was titled under the husband's name only. Under that assumption, it is generally implied that a transition from title-based to equitable regimes benefits wives. However, those results will inevitably also commingle the effects for households in which the wife is the one on the title (and loses with a move to equitable division) and those in which both are on the title (and the wife is thus unaffected). Because we can observe who is on the title before the Supreme Court decision was announced, a key advantage of our research design is that we can more cleanly identify the households in which only the husband's name is on the title and focus our analysis on that large subsample. When the property was purchased after marriage, the spouses in these households should be unaffected by the Court's ruling, as equal division still applies in that case, despite only the husband's name being on the title. When the property was purchased before marriage, the husband gains and the wife loses with the legal change, as now the name on the title is upheld

upon divorce. This legal change has effects that have opposite signs for the wife and the husband, or have no effect, depending on the details of home ownership at baseline. Observing these details thus allows us to focus on the families in which the effects will be more cleanly identified.

The remainder of the paper is structured as follows. The next section reviews the relevant institutional background and the 2011 Supreme Court decision that effectively redefined housing property division upon divorce in China. Section 3 describes the data and our sample construction. Section 4 presents the empirical strategy. We report the empirical results in Section 5, and Section 6 concludes.

2 Institutional Background

Housing property is considered the most important component of all family assets for Chinese families. This is especially true since the privatization of the housing market in 1998, after which home ownership became common in China.[4] Since then, home prices have risen rapidly. Wu et al. (2012) report more than doubled home prices across major Chinese cities during the period from 2000 to 2010. Given the trend of soaring home prices, owning a house or an apartment signals that a man is successful, committed to marriage, and able to weather challenging financial circumstances, which improves his position in the marriage queue.

Accordingly, new social norms and marriage customs have emerged: A bride's family usually expects the groom or his family to provide a home prior to the wedding (Pierson, 2010, Lim et al., 2013). Given the high home prices, the burden of home-buying thus falls heavily on the groom's parents. According to a government report produced by the Department of Housing Provident Funds (2009), more than 50 percent of first-time home buyers in Shanghai were below 30 years old, and around 62 percent had received financial

[4]Prior to the 1990s, a private housing market did not exist in China. Nearly all urban residences were nationalized and controlled by the central government, which assigned housing units to workers. There was no market for workers who sought to sell their current home or buy a new one. In 1998, the State Council's 23rd Decree formally laid the legal foundation for a private housing market by requiring that housing be purchased on the open market at market prices, marking the establishment of a real estate market system.

support from parents to make down payments and mortgage payments.[5] Housing has become the most important component of marriage expenditure and the largest lifetime investment for most Chinese families; Gan et al. (2013) find that the value of the family home comprises around 50 percent of total family assets in China in 2012.

2.1 Divorce Laws in China

In China, marriage used to be universal and mostly permanent; in premodern China, women were not allowed to divorce their husbands. The 1981 Marriage Law allowed divorce under mutual consent.[6] In 2001, the Marriage Law Amendment loosened the criteria for filing a divorce.[7] Specifically, divorce would be granted if the spouses had lived separately due to lack of mutual affection for at least 2 years. As a result, starting in 2001, the grounds for divorce in China can essentially be described as something closer to a unilateral divorce regime, in that either spouse can file for divorce by simply claiming that mutual affection no longer exists. Since then, divorce rates have steadily increased in China. According to China's National Bureau of Statistics, the divorce rate increased from 4.36 divorces per 1,000 marriages in 2004 to 8.57 in 2014, almost doubling in 10 years. Accordingly, divorce cases in courts have increased, and disputes regarding housing property rights are the most frequent.

To summarize, after the privatization of the Chinese housing market in the late 1990s, housing increasingly became an important asset for starting a marriage. By social norms and marriage customs, the burden of purchasing the house usually falls on the groom and his family. As a result, the home is usually registered solely in the husband's name. In a small number of cases, however, the property is registered in the wife's name only or under both spouses' names. Because housing has become the largest component of marital

[5] A similar finding is reported in CBRE (2016). In this survey, 80 percent of the Chinese young adults interviewed agreed that wages were not keeping up with home prices, and over two-thirds agreed that they could afford a property only with financial support from their parents and relatives.

[6] Article 24 in the Marriage Law of the People's Republic of China (1981): "Divorce shall be granted if husband and wife both desire it. Both parties shall apply to the marriage registration office for divorce."

[7] Article 32 in the Marriage Law of the People's Republic of China (2001 Amendment): "Where either the husband or wife applies to get divorced, the parties concerned may request mediation, or he or she may file a suit at the People's Court for divorce. The People's Court shall order mediation in the process of hearing a divorce suit; divorce shall be granted if mediation fails because mutual affection no longer exists."

assets, the division of housing property in the event of a divorce is of great importance for Chinese couples. A growing literature in economics examines the role housing plays in marriage decisions in China (see, for example, Wei and Zhang (2011)).

2.2 The 2011 Supreme Court Decision

In 2011, the Supreme Court issued a judicial interpretation of the Marriage Law. It stipulated that in the event of a divorce, the *housing property* bought by one spouse prior to marriage remains the personal asset of that spouse, provided that only his (her) name appears on the title. Another item says that if the house was purchased by the parents of either the groom or the bride, it shall be deemed a gift to that spouse, and therefore would revert to him or her on divorce.[8] Previously, the family home was considered marital property and would be allocated based on equitable division at divorce, even if purchased by the groom before marriage.[9]

In other words, the Supreme Court decision in 2011 directly relates to the possession of a family house in the event of a divorce. This change in the law has attracted great attention and prompted massive discussion and complaints in social media, given the skyrocketing real estate prices in recent decades. Baidu Trends data revealed a fivefold rise in the volume of queries on "marriage law" and "housing title" within the first 2 months after the Supreme Court's ruling. The *New York Times* portrayed the scene as married women in China waking up to discover their husband had become their landlord.[10]

[8] Articles 7 and 10 in Interpretation (III) of the Supreme People's Court of Several Issues on the Application of the Marriage Law of the People's Republic of China (2011).
Article 7: "Where the title to real estate purchased by the parents of one party for the party after the party's marriage is registered under the party's name, such real estate shall be deemed a gift given by the parents to the party and be determined as the party's personal property."
Article 10: "Where a spouse signs a real estate purchase contract, makes a down payment with his/her personal property, and gets a loan from a bank before marriage, if the spouse repays the loan with community property after marriage and the real estate is registered under the name of the payer of the down payment, such real estate shall be handled at the time of divorce by both parties by agreement. If no agreement is reached according to the preceding paragraph, the People's Court may render a judgment to award such real estate to the party under whose name the real estate is registered, and the unpaid loan shall be the personal debt of the party under whose name the real estate is registered."

[9] It should be noted that the concept of premarital assets as personal property first appeared in the 2001 Amendment (Article 8). This was not effective, however, because it did not stipulate the conditions or clearly delineate personal property settlements at divorce. See Ogletree Jr and de Silva-de Alwis (2003) for details of Chinese Marriage Law from 1950 to 2001.

[10] *New York Times*, "Chinese Law Could Make Married Women Homeless," September 7, 2011. `https://www.nytimes.com/2011/09/08/world/asia/08iht-letter08.html`, accessed on September 19, 2018.

Because of deeply held social norms and marriage customs, under which the groom and his family usually provide the marital home, the Supreme Court decision created an unexpected shock to intrahousehold allocations for millions of families.

The result has been chaotic. In October 2011, *China Daily* reported that lawyers had been overwhelmed by phone calls asking about the new interpretation of the marriage law. To avoid possible legal disputes after marriage, a growing number of couples have signed or prepared prenuptial property agreements; some couples have rushed to add the spouse's name to the title.[11] Data from the CFPS survey, which is regarded as nationally representative of Chinese families, show that for the same families during the period from 2010 to 2014, the proportion of families whose home title had multiple names increased from 3 percent in 2010 to 11 percent in 2012 and 15 percent in 2014.

It is important to emphasize that the law was retrospective and affected not only new marriages that went on to form after 2011 (which are not included in our analysis) but, critically, it also affected couples who married before 2011 and were still married in 2011 at the time of the Court's decision. In fact, it is these marriages that formed before 2011, some of whom were and some of whom were not affected retroactively by the 2011 Supreme Court decision, the ones that we use in our empirical analysis.

3 Data

3.1 The Chinese Family Panel Studies

The data we use to test the socioeconomic consequences of the Chinese 2011 Supreme Court decision are drawn from three waves of the CFPS. This is a nationally representative social survey, with a large sample size, advanced sampling design, and low attrition rate. It is conducted biennially and aims to document the massive transformation of Chinese society, economy, education, and health by focusing on the economic and noneconomic well-being of Chinese nationals. The CFPS consists of four data sets with high-quality

[11] *China Daily*, "Marriages Need Cash and Love," October 18, 2011, `http://www.chinadaily.com.cn/cndy/2011-10/18/content_13920654.htm`, accessed on September 19, 2018.

longitudinal information at the individual (both adult and youth), family, and community levels. This large-scale study contains a total of 14,960 successfully interviewed households with 33,600 adults and 8,990 children living in 645 communities in 25 designated provinces, representing 95 percent of the entire population of contemporary China (Xie, 2012; Xie and Hu, 2014).[12] Moreover, the CFPS implements probability-proportional-to-size sampling (PPS) with implicit stratification by administrative units and socioeconomic status. This design ensures its national representativeness. We can thus generalize our empirical findings to the Chinese population.

The CFPS baseline national survey was officially launched in 2010 in 25 provinces. Two full-scale follow-up interviews were carried out in 2012 and 2014. Thus, the data used in our main analysis include one wave before and two waves after the marriage property law was reinterpreted by the Supreme Court of China in 2011. The panel's longitudinal nature allows us to investigate how changes in housing property division upon divorce affect household behavior throughout the sample period, *for the same households*.

The CFPS offers uniquely comprehensive data on home ownership. The questionnaire collects detailed information on a family's housing property, including the name(s) on the title and year of purchase. Using the information on home ownership collected in 2010, we can exactly identify those spouses who stand to gain (and lose) from the 2011 Supreme Court's ruling. For instance, a wife in a family whose house was (a) bought before her marriage and (b) registered solely in her husband's name is considered a potential loser. This is because prior to 2011, the marital home was considered a joint asset and would be distributed equally upon divorce even if it is purchased by the groom before marriage. Since 2011, in contrast, that property is regarded as her husband's personal asset and would be awarded solely to him upon divorce.

Moreover, the CFPS contains rich information on demographic and socioeconomic characteristics for each family member, including age, gender, marital status, and family size. It also provides data on the spouses' employment status and consumption. The survey assigns household identification numbers, which allow us to group individuals by

[12]The excluded regions are Hong Kong, Macao, Taiwan, Xinjiang, Tibet, Qinghai, Inner Mongolia, Ningxia, and Hainan.

living unit. Based on this, we can precisely identify parent-child relationships for each family, which allows us to extract information on parental investment in their children. Using the first wave of the CFPS, we observe household behavior and decisions prior to 2011. As we match individuals throughout the three waves, we can observe the changes in their behavior and decisions before and after 2011.

For our purposes, we extract a sample that includes all families in which (a) the couple was married prior to 2010 and remained in the same marriage in 2012 and 2014, and both adults in the couple were followed up in 2012 and 2014;[13] (b) the family owned home in 2010 and the home was titled in the husband's name only;[14] and (c) the wife was born after 1954 (less than 60 years old in 2014). By placing restrictions on marital status, home ownership, and the wife's age, we maximize comparability across families. In the analysis, families are categorized by the timing of the home purchase—either before or after marriage. Overall, the sample contains 4,541 families; 1,439 purchased the home prior to marriage and 3,102 during marriage.[15]

3.2 Main Outcome Variables

To analyze how the legal change affects household behavior, we examine three sets of outcome variables: (i) employment status for both spouses; (ii) alcohol consumption for both spouses; and (iii) investment in child's human capital.

Specifically, we examine employment status for both spouses, defined as a binary variable that equals one if the spouse works at the time of the survey. This employment status comes from a question on the CFPS family survey that asks whether the individual currently has a job. The measure on the second outcome variable is also drawn from the CFPS family survey, which asks the frequency of alcohol consumption for each spouse. We define this variable as equal to one if the spouse drinks at least three times

[13]We later show that this restriction does not generate differential attrition bias in our analysis.

[14]This includes both families in which the housing property title remained in the husband's name throughout our analysis and those in which the wife was eventually added to the title, either in 2012 or 2014. We drop a small number of families in which the housing property is registered in the wife's name only or under both spouses' names in 2010.

[15]The before-marriage group is smaller, and of course the characteristics of households that purchase before marriage could differ from those in the after-marriage group. However, we will be using a family fixed effects design, and therefore any permanent differences across households will be accounted for.

a week. For investment in children's human capital, we turn to the CFPS child questionnaire. We focus on children aged 2 to 12 in 2010 and examine the family's annual expenditure on child's additional education fees, such as for extracurricular activities and after-school tutoring.[16] By doing so, we obtain a balanced panel that contains information on educational expenditure for 2010, 2012, and 2014.

3.3 Summary Statistics

Table 1 presents the summary statistics for the pooled sample of the 4,541 families we analyze. Panel A describes the summary statistics for our outcome variables. On average, 77 percent of females and 91 percent of males are employed. Married men tend to drink more alcohol: 3 percent of wives in our sample drink at least three times a week, while 33 percent of husbands do so. In our main sample, an average family spends approximately 613 yuan on child's tutoring.

As stated previously, our analytic sample only includes families in which the family home is in the husband's name only. Of these, the proportion of families whose houses were purchased prior to marriage is 32 percent. This pattern is consistent with emerging social norms and marriage customs, under which couples often purchase their marital home before marriage.

Panel B reports descriptive statistics for family demographic characteristics and other explanatory variables in our empirical analyses below. In our main sample, the average age for wives is 43.5 years and for husbands is 45.4. An average family has 1.8 children and is of size 4.5. An average couple has been married for 21.3 years.

Columns (2) and (3) of Table 1 report means separately for treatment and control groups. The groups differ somewhat in some characteristics. However, our analyses below use household fixed effects, which control for all time-invariant characteristics. In addition, we allow for interactions between time-varying household characteristics and survey year indicators to allow the effects of those characteristics to change over time.

[16] If a family has more than one child in the child data, we keep the first.

4 Empirical Strategy

The change to division rules for housing property took place uniformly across married families in 2011. We follow the same families longitudinally, before and after 2011. The families we analyze were formed before 2010, so they were already married during the first CFPS wave. We only consider the impact on these already-formed households. We do not examine the impact of the judicial decision on household formation as done, for example, by Chiappori et al. (2017). The empirical strategy identifies the effects from within-household changes in the various behaviors. Our empirical strategy is a difference-in-differences design. It compares the changes in family outcomes before and after 2011 across two groups of families that purchased the family home either before marriage (treatment group) or during marriage (control group). Despite this being a judicial ruling that applied nationwide, the fact that only families in which the home was purchased prior to marriage were affected allows us to have a control group that consists of the two-thirds of families that purchased the home after marriage. Further, as explained in Section 2, both the treatment and the control group expected, as of 2010, that their home would be split equitably upon an eventual divorce. The families in the control group (who purchased the home after marriage) continue to hold this expectation after 2011. The families in the treatment group (who purchased the home before marriage) suddenly realize, after 2011, that the home will actually be allocated to the husband upon divorce, in stark contrast to their previous understanding.

4.1 Regression Specification

We use a regression-based implementation for our difference-in-differences (DID) estimator. We estimate the effect of the 2011 Supreme Court decision on families in which the groom purchased the future family home before marriage, using the following model:

$$Y_{it} = \beta_0 + \beta_1(BeforeMarriage_i \times After2011_t) + \mathbf{X}_{it}\gamma + f_i + \delta_t + \epsilon_{it}, \tag{1}$$

where Y_{it} is a measure of household outcome for family i in year t. We have three types of outcome variables: (i) employment status, (ii) alcohol consumption, and (iii) expenditure on child's education. A key explanatory variable, $BeforeMarriage_i$, is a binary indicator that equals one if the family home was purchased before the couple got married. $After2011_t$ is an indicator that equals one for post-2011 periods, i.e., 2012 and 2014. A vector of additional control variables, $\mathbf{X}_{it}$, includes various spousal and family characteristics, such as spouses' ages, years since marriage, number of children, and family size, as well as their interactions with year fixed effects. All specifications include family and year fixed effects, f_i and δ_t, respectively. Therefore, both $BeforeMarriage_i$ and $After2011_t$ are excluded from the equation above. The error term, ϵ_{it}, captures time-varying independent unobserved heterogeneity and measurement error. Our statistical inference is based on heteroskedasticity-robust standard errors. Specifically, we are interested in the estimate of β_1, which captures the impact of the Supreme Court's ruling on the affected families.

How could this new legal interpretation regarding the division of property upon divorce affect household outcomes within marriage? Following Chiappori et al. (2002), we argue that the ruling directly changes property rights regarding the family home in the event of a divorce. After 2011, in families that purchased the housing property *prior* to marriage and held title solely in the husband's name, women would receive a smaller post-divorce allocation relative to those in families with housing property purchased *during* marriage, even when the latter also held title solely in the husband's name. As a result of the less favorable outside option, intrahousehold bargaining power decreases for wives in the families that purchased prior to marriage relative to those in families that purchased after marriage.

Similarly, in addition to affecting spousal leisure allocations and thus labor supply, the legal change influences the amount of spousal private consumption, such as alcohol, a traditionally male-favored good. After the Court's decision in 2011, the husband in a family with a home purchased prior to marriage enjoys a more favorable outside option in the event of divorce. Therefore, family demand for certain consumption goods will shift

to more fully reflect his preferences. The judicial ruling alters intrahousehold bargaining power within marriage, and the spouse with increased bargaining power is able to steer consumption allocations in their preferred direction. Hence, after the legal change, the typical husband in a family that purchased the home prior to marriage would increase his consumption of alcohol.

Similarly, we expect this change to affect a family's investment in children. Lower bargaining power for the wife prevents her from steering allocations in her preferred direction (e.g., higher investment in children). Studies in this area document that reduced bargaining power for the mother often translates into lower investment in and well-being for children.

In summary, we expect this legal change to trigger large changes in bargaining power that translate into large changes in labor supply, consumption, and investment in children within affected households.

4.2 Pre-2011 Placebo Tests

Before presenting our main results, we follow standard practice and investigate whether household behavior in families that purchased the home prior to marriage and those that purchased it after marriage follows the same trend over the period prior to 2011. To that end, we use data from the CFPS pilot survey and the pilot follow-up survey, conducted in 2008 and 2009.[17] Using the same restriction methods as in Section 3.1, we obtain a pilot sample of 368 families.

Using the pilot surveys, we show that our treatment and control families display common trends before the 2011 Supreme Court decision. Specifically, in this section, home ownership is defined from the 2008 pilot survey. We create an indicator for a "placebo law" in 2008. $After2008_t$ equals one for the post-2008 period. As in our main analysis, we examine two outcome variables for each spouse: employment status and alcohol consumption. Since the CFPS pilot surveys contain limited information on the family's

[17]The CFPS pilot studies were conducted in Beijing, Shanghai, and Guangdong prior to the national baseline survey, which was launched in 2010. The pilot studies include a baseline survey in 2008 and a follow-up survey in 2009.

investment in each child, we do not examine investment in children's human capital in this section. All specifications include family fixed effects, year fixed effects, family characteristics (spouses' ages, family size, and years since marriage), and the interactions between family characteristics and year fixed effects. Since the placebo law precedes the announcement of the actual judicial decision in 2011, the DID estimates should be zero.

Columns (1)-(4) in Table 2 present evidence for common preexisting trends, as the DID estimates are indistinguishable from zero. Specifically, from 2008 to 2009, the evolution of labor-market participation and alcohol consumption for both spouses does not vary significantly across the two family types. In other words, prior to the 2011 ruling, household behavior and decisions do not evolve differently between families in which the home was purchased before and after marriage. Therefore, it is reasonable to assume that in the absence of the 2011 judicial ruling, the various outcomes for these two types of families would follow the same time trend. Note, however, that the pilot surveys were much smaller, so they may have somewhat limited power to detect small preexisting differential trends.[18]

5 Results

In this section we present empirical results for the effects of the 2011 Supreme Court ruling, which shifted the division of premarital property upon divorce from an equal-division regime to a title-based regime. We identify the effects for families in which the purchase happened prior to marriage (the treatment group) relative to families that purchased during marriage (the control group). We begin by examining the effects on spouses' employment status, alcohol consumption, and intergenerational investment. We next investigate heterogeneous effects. Finally, we check the robustness of our estimates.

Table 3 reports our main estimation results. The dependent variables are female and male employment in Panel A, alcohol consumption in Panel B, the family's annual expenditure on child's tutoring in Panel C, and an index of bargaining power that combines

[18]Still, we feel reassured in that no statistically significant differences in trends can be documented with the available data, and the point estimates for the differential trends are numerically very small and close to zero.

the outcomes in the other panels in Panel D.

5.1 Employment

To examine the changes in both spouses' labor supply in response to the shift from equal-division to title-based property division regimes, we estimate the linear probability model in Equation (1). In particular, the outcome variable Y_{it} equals one if the spouse in family i is employed in year t and zero otherwise. Panel A in Table 3 reports the estimation results. Column (1) is the baseline specification on wife's employment, which includes only family and survey-year fixed effects. Column (2) adds the couple's ages, number of children, size of family, and years since marriage, as well as their interactions with year fixed effects. The dependent variables are female employment in the first two columns and male employment in the next two columns.

We find that the Supreme Court's ruling in 2011 is associated with an *increase* in employment probability for married women in families in which the home was purchased prior to marriage. For example, in column (1) the coefficient estimate is 0.051 (statistically significant at the 1 percent level). This estimate implies that the introduction of title-based property division is associated with a 5.1-percentage-point increase in employment probability for women in families in which the husband purchased the home before marriage. This effect is of moderate size, given that the baseline labor market participation rate of married women is 76.6 percent in our sample. The results remain robust when we include additional controls in column (2). The employment probability for men, on the other hand, decreases in families with homes purchased before marriage. The effect is statistically significant at the 1 percent level (column (4)). These findings support our hypothesis, which suggests that title-based housing property division increases women's employment by shifting bargaining power toward their husbands. Therefore, after the legal change, women in families with homes purchased before marriage become more likely to work, relative to women in families that purchased during marriage. This finding is consistent with that of Voena (2015).

The link between female employment and intrahousehold bargaining power, as affected

by property division law, has not been sufficiently studied in U.S.-based literature; notable exceptions that explore the issue in conjunction with grounds for divorce (mutual consent vs. unilateral) include Gray (1998), Chiappori et al. (2002), Stevenson (2008) and Voena (2015). In this study, we provide evidence that the 2011 change in property division laws, which did not affect the rules governing grounds for divorce, was associated with a decrease in intrahousehold bargaining power for Chinese married women when the home was purchased *prior to* marriage and registered solely in the husband's name. This is reflected in the increase in their employment probability, relative to that of married women with homes purchased *during* marriage.

5.2 Alcohol Consumption

To obtain more evidence, we examine the effects of the 2011 ruling on spouses' private consumption. Panel B of Table 3 reports estimates for the same specifications as in Panel A, but now the dependent variable is an indicator that equals one if the spouse consumes alcohol at least three times a week. The estimates show that the introduction of title-based division of premarital property upon divorce is associated with an *increase* in alcohol consumption for married men in families in which the home was purchased before marriage, compared with those in families that purchased during marriage. In column (7), the coefficient estimate for the effect is 0.04 (statistically significant at the 1 percent level), which again is not minor, in light of the mean outcome of 0.33 in the sample. This finding is again robust to controlling for additional family characteristics and their interactions with year fixed effects.

In line with our prediction, the results suggest that when the family home is registered in the husband's name only, married men devote more household resources to their own private consumption, on average, if the home was purchased prior to marriage, than those whose home was purchased after marriage. These results provide further evidence suggesting that title-based property division increased men's bargaining power in the household. Most women do not drink heavily, even if they could. Thus, we expect the elasticity of women's alcohol consumption with respect to her bargaining power to be low.

Indeed, the results on female's alcohol consumption suggest that the change in property division rules leads to a slight increase in women's consumption of alcohol in families that purchased the home prior to marriage (columns (5) and (6)). However, the results are not statistically significant.[19]

5.3 Investment in Children's Human Capital

We now turn to the third set of results: investment in children. We restrict our sample to 1,427 children aged 2 to 12 in 2010.[20] This analysis additionally controls for child's age. Table 3 presents the effects of title-based housing property division laws on investment in children for families in which the home was purchased prior to marriage. Specifically, we are interested in the family's annual tutoring expenses for each child.[21]

In Panel C, the estimated interaction-term coefficients, β_1, are negative and statistically significant, which suggests a lower level of investment in children's education in affected families relative to control families after the switch to a title-based regime. For families that purchased the home prior to marriage, the judicial ruling has a negative effect on tutoring expenditures for each child. These estimates are statistically significant at the 5 percent level (column (10)).

These estimates suggest that after 2011, families with homes purchased prior to marriage invest less in children's education compared with families unaffected by the ruling. This result is consistent with previous studies that link increased maternal bargaining power to investment in children and children's well-being (Duflo, 2003; Lundberg et al.,

[19]Since our specification includes family fixed effects, we are not able to carry out a standard test of cross-equation restrictions in the context of a SUR (seemingly unrelated regression) system. Therefore, we opt to use a bootstrap-based test in which we repeatedly re-sample the data and separately re-estimate the effects on husband's and wife's alcohol consumption. The statistical significance of the difference in husband and wife alcohol consumption coefficients in columns (6) and (8) in panel B of Table 3 is borderline. The lower bound for a two-sided bootstrap-based 90 percent confidence interval using the percentile method is almost zero (CI = [-0.006, 0.056]) but, technically, we cannot reject a zero difference (equality of alcohol consumption effects). A one-sided test, on the other hand, would easily reject the null of a non-positive (i.e., negative or zero) husband-wife difference in alcohol consumption effects, as expected according to the bargaining power story.

[20]By the age of 12, most children in China have finished the sixth grade, which is the last year in elementary school. For details on sampling frame, attrition, and interviews, see Xie (2012) and Xie and Hu (2014).

[21]Annual tutoring expenditure consists of family's spending on child's extracurricular activities and after-school tutoring fees. This variable is measured at child level.

1997; Rubalcava et al., 2009; Thomas, 1990). While we do not observe maternal time with children, it is possible that not only do these families spend less on children but also spend less maternal time on them as wives raise their labor supply. Thus, if the change in the law were to lead to divorce being more likely, there could be other mechanisms that generate this pattern in addition to the standard bargaining power story.[22]

5.4 Bargaining Power

We consider the spousal employment, alcohol consumption, and investment in child's education to be measures of bargaining power and combine them in an index following Anderson (2008). The index is higher when the wife has more bargaining power. We see, in Panel D, that the change in property division upon divorce leads to a significant reduction in this index for affected families, relative to control families.

5.5 Heterogeneous Effects

This section studies the differential impacts of the 2011 Supreme Court decision for two subsamples. Specifically, we examine whether the effects vary depending on whether the family still has an outstanding mortgage balance or the home has been fully paid for by the time of the baseline survey in 2010. The motivation for exploring heterogeneity results by mortgage status comes from the expectation that one would observe stronger employment or alcohol effects in families with fully paid-for homes, as more equity in the housing asset is at stake for those couples. Indeed, two prior-purchase families with houses of the same market value could face different divorce allocations, depending on whether they have an outstanding mortgage. When the family has not paid off its housing debt, the net asset value of the home at stake is reduced, resulting in smaller changes in spouses'

[22]This possibility, that the wife might feel compelled to no longer sacrifice labor-market experience to invest her time in the child, and thus lead to an increase in her labor supply and a reduction of her time her children, has been formalized by LaFortune and Low (2020) in their model of collateralized marriage. In our context, the Supreme Court decision in 2011 could be interpreted as taking away the collateral that women thought they would have when they agreed to marry and specialize in the raising of children. Before 2011, an entitlement to equal-division of the husband's premarital housing property upon divorce served as collateral in the event of divorce initiated by the husband, after investment in children (mostly by using the wife's time) is completed.

divorce allocation after 2011 and ultimately smaller changes in spouses' within-marriage bargaining positions.

To this end, we define an indicator, $FullyPaid_i$, that equals one if family i has the home fully paid for by 2010. We then estimate the same specification in (1) separately for families with a mortgage balance in 2010 ($FullyPaid_i = 0$) and families with fully paid homes by 2010 ($FullyPaid_i = 1$).

Estimation results are presented in Table 4. We find that the impacts on the wives' employment probability detected in the main sample seem to be primarily driven by families with fully paid-for homes. Specifically, in column (6), the estimated β_1 indicates an increase in employment probability by 4.8 percentage points for wives in families with homes purchased prior to marriage. On the other hand, in the subsample with outstanding mortgages at baseline, the treatment effect on women's employment probability is estimated to be a negative 2.4 percentage points, although not statistically significant (column (1)). We use a bootstrap-based two-sided (percentile method) test and find that these effects are statistically different in the two subsamples. Wives' employment significantly increases primarily in families with fully paid-for homes. The point estimate for the difference in effects between these two subsamples is large, at (0.048-(-0.024) =) 0.072. The 90 percent confidence interval for the difference is CI = [0.003, 0.141], so we reject the null of equal effects. The differences in the estimated effects for other outcomes are statistically insignificant between the two samples.

5.6 Robustness Checks

In this section, we document the robustness tests we conduct to verify our main results. We first confirm that there is no differential attrition between the treated and control families. We also show that the estimated effects are robust to using an extended control group that includes other types of families that are unaffected by the 2011 ruling. Finally, we check that our results are similar when using an alternative measure of employment.

5.6.1 Attrition

First, we examine the potential selectivity of attrition. Attrition in the main sample could be a potential threat if the families that drop out of the sample are systematically different from those that stay. In our context, since we restrict our attention to couples who remained in the same marriage throughout the three waves, the attritors include couples who divorced after the first wave of the survey and those who did not respond to follow-up surveys in 2012 and 2014. If there is selective attrition, the main sample becomes less representative of the population of Chinese families, and hence the estimates become less reliable. To address this, we use data that include all families who appeared in the 2010 survey, regardless of whether they remained married or responded to follow-up surveys in the latter years. Using the same restrictions on the timing of home purchase and wife's age, we obtain a sample of 5,859 families.

We start with a parsimonious specification for the probability of attrition. The dependent variable is an indicator that equals one if attrition occurs between survey rounds. The estimated results are shown in Table 5. Specifically, the dependent variable in the first two columns equals one if the couple was recorded as divorced at the time of the 2012 (or 2014) wave. In the next two columns, the dependent variable is an indicator for non-response in 2012 (or 2014). Finally, we use an indicator that equals one in the last two columns if the couple dropped out of the main sample in 2012 (or 2014) for any reason.

Reassuringly, conditional on all predetermined family characteristics, such as couples' age categories, number of children, size of family, and years married, the estimated coefficients on the treatment indicator are indistinguishable from zero. The results suggest that there is no significant association between sample attrition and the timing of home purchase in families in which the home was registered solely in the husband's name.

5.6.2 Extended Control Group

In the main analysis, we focus on families whose homes were registered solely in the name of the husband. The treatment group includes families in which the home was purchased

prior to marriage, while the control group consists of those who purchased the home during marriage. To check the robustness of our results, we expand our control group to include all families that purchased homes after marriage, regardless of whose name was on the title. These families provide a valid control group, because property rights upon divorce for marital homes purchased *during* marriage remained unchanged before and after 2011, regardless of who was or wasn't on the title.

We re-estimate specification (1) and obtain similar findings in Table 6. Coefficient β_1 now captures the changes before and after 2011 in outcomes in families with husband-owned homes purchased prior to marriage relative to changes in all the other families that purchased their homes after marriage. Panel A reports the impacts on spousal employment. Panel B focuses on alcohol consumption by spouses, Panel C on investment in child's education, and Panel D on an index of female bargaining power. Reassuringly, we again find statistically significant positive relative effects on wife's employment and husband's alcohol consumption, and negative effects on husband's employment and investment in children's education.

5.6.3 Hours Worked

To expand on the results on extensive margin employment, we use an alternative variable that measures spouses' annual working hours. The results are reported in Table 7. The estimated coefficient for female is positive and significant at the 5 percent level, suggesting that married women in families that purchased the home before marriage indeed work more after 2011 (column(1)). We obtain similar findings in column (3) when restricting our attention to nonzero working hours, although the estimate is statistically insignificant.

6 Conclusions

In this paper, we show that property division rules upon divorce play a significant role in shaping household behavior during marriage. Specifically, we use data from the CFPS to estimate household responses to a 2011 Supreme Court decision in China, which effectively

changed how a family's home was to be divided between spouses in the event of a divorce. Our analysis highlights changes in behavior before and after the Court's ruling, across two types of families that differ with regard to the relative timing of home purchase and marriage. Our empirical strategy relies on a difference-in-differences design, with those who purchased the home before marriage (the treatment group) compared with those that purchased it after marriage, and were thus unaffected by the Court's decision (the control group). The results suggest that the shift from equal-division to title-based division of premarital housing property titled in the husband's name was associated with large changes in intrahousehold allocation. Specifically, the change led to an increase in wives' participation in the labor market (i.e., a reduction in leisure) and more private consumption of husband-favored goods like alcohol. In addition, these families reduced their investment in children's human capital. The results hold up when subjected to various robustness checks.

Our results raise two major policy concerns in China. The first directly relates to inequality within the household. According to social norms and marriage customs, the homes in which the newlyweds will reside are often purchased by the groom or his family prior to marriage, with title held under his name only. Before 2011, the fact that the title was under the husband's name was of little significance, given the equal division upon divorce of a premarital housing asset used as the family home during marriage. In 2011 however, this took on much greater significance with the shift from an equal-division regime when the Supreme Court revised the interpretation of marriage law and excluded premarital housing assets from the equal-division standard. The resulting title-based regime for premarital housing property put most Chinese wives who married before 2011 in a much more vulnerable position, and the impact on their well-being will be felt for decades to come. Second, our findings suggest that this influential ruling is associated with under-investment in children's education in families in which the husband's bargaining power is strengthened. As a result, the 2011 decision discouraged investment in children's human capital in the many families in which the home was purchased before marriage. The resulting under-investment in children's education may have serious socioeconomic

consequences in the long run (Heckman et al., 2013).

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7 Tables and Figures

TABLE 1 Summary Statistics

	(1) **All**	(2) **Before Marriage**	(3) **After Marriage**	(4) **Difference**
Panel A: Outcome Variables				
Female employment	0.766	0.769	0.765	0.003
	(0.423)	(0.422)	(0.424)	(0.008)
Male emplpoyment	0.910	0.930	0.900	0.030
	(0.287)	(0.255)	(0.300)	(0.005)
Female alcohol consumption,	0.031	0.031	0.031	0.001
at least 3 times a week	(0.173)	(0.174)	(0.172)	(0.003)
Male alcohol consumption,	0.333	0.340	0.330	0.010
at least 3 times a week	(0.471)	(0.474)	(0.470)	(0.009)
Annual expenditure on tutoring,	0.613	0.530	0.722	-0.192
thousand yuan	(1.890)	(1.558)	(2.247)	(0.058)
Panel B: Family Characteristics				
Age, female	43.509	36.383	46.815	-10.432
	(9.263)	(8.826)	(7.415)	(0.145)
Age, male	45.398	38.295	48.693	-10.397
	(9.646)	(9.264)	(7.884)	(0.154)
Number of children	1.824	1.602	1.927	-0.326
	(0.867)	(0.830)	(0.865)	(0.016)
Size of family	4.465	4.936	4.246	0.690
	(1.731)	(1.812)	(1.648)	(0.031)
Years since marriage	21.267	13.390	24.921	-11.531
	(9.600)	(8.578)	(7.657)	(0.147)
Observations	13,623	4,317	9,306	

Note: Data are from three waves of the CFPS survey (2010, 2012, and 2014). Column (1) includes all households in the 2010 CFPS family data set in which (a) the couple married prior to 2010 and remain in the same marriage in 2012 and 2014; (b) the marital home is in the husband's name only; and (c) the wife was born after 1954 (less than 60 years old in 2014). Column (2) restricts the sample to households in which the marital home was purchased prior to marriage and was in the husband's name only. Column (3) includes only households in which the marital home was purchased after marriage and was in the husband's name only. Columns (1)–(3) report the mean and standard deviation (in parentheses) of the respective variables. Column (4) displays the difference between the two means and the associated standard error (in parentheses).
For annual expenditure on tutoring in Panel A, the sample includes children aged 2-12 in 2010. If a family has more than one child in the child data, we keep the first. The total number of observations is 11,877 for alcohol consumption and 4,281 for annual expenditure on tutoring.

TABLE 2 Placebo Regressions

Dependent Variable:	**Employment**		**Alcohol Consumption**	
	Female	**Male**	**Female**	**Male**
	(1)	(2)	(3)	(4)
Before Marriage × After 2008 (β_1)	0.0043	-0.0036	-0.0052	-0.0027
	(0.0570)	(0.0347)	(0.0311)	(0.0664)
Family fixed effects	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES
Family characteristics	YES	YES	YES	YES
Year fixed effects × Family characteristics	YES	YES	YES	YES
Observations	736	736	736	736
Number of families	368	368	368	368
Sample mean outcome	0.686	0.842	0.042	0.438

Note: Data from the CFPS pilot survey (2008) and the pilot follow-up survey (2009). Sample restricted to couples who stayed married and owned a home in the pilot studies, and only the husband's name was on the title in 2008.
Dependent variables are listed in column titles. Column (1): a dummy variable on female employment status; (2) male employment status; (3) a dummy variable on female's alcohol consumption; (4) male's alcohol consumption. Home ownership is defined from the 2008 pilot survey. In all regressions, the treatment group is families in which the marital home was purchased prior to marriage and was in the husband's name only. The omitted family type is a family in which the marital home was purchased after marriage and was in the husband's name only. All columns control for family fixed effects, year fixed effects, family characteristics (the couple's ages, size of family, and years since marriage), and the interactions between family characteristics and year fixed effects. Robust standard errors are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

TABLE 3 Intrahousehold Bargaining and Intergenerational Investment

Dependent Variable:	**A. Employment**			
	Female		**Male**	
	(1)	(2)	(3)	(4)
Before Marriage × After 2011 (β_1)	0.0505***	0.0298*	-0.0111	-0.0322***
	(0.0150)	(0.0176)	(0.0105)	(0.0125)
Observations	13,623	13,623	13,623	13,623
Number of families	4,541	4,541	4,541	4,541
Sample mean outcome	0.766	0.766	0.910	0.910
	B. Alcohol Consumption			
	Female		**Male**	
	(5)	(6)	(7)	(8)
Before Marriage × After 2011 (β_1)	0.0091	0.0072	0.0397***	0.0311*
	(0.0061)	(0.0083)	(0.0152)	(0.0186)
Observations	11,877	11,877	11,877	11,877
Number of families	3,959	3,959	3,959	3,959
Sample mean outcome	0.031	0.031	0.333	0.333
Family fixed effects	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES
Family characteristics	NO	YES	NO	YES
Year fixed effects × Family characteristics	NO	YES	NO	YES
	C. Expenses on Child's Education		**D. Female Bargaining Power**	
			Index 1	**Index 2**
	(9)	(10)	(11)	(12)
Before Marriage × After 2011 (β_1)	-0.1583*	-0.2244**	-0.2027***	-0.1292***
	(0.0935)	(0.1049)	(0.0746)	(0.0448)
Family fixed effects	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES
Family characteristics	NO	YES	YES	YES
Year fixed effects × Family characteristics	NO	YES	YES	YES
Observations	4,281	4,281	3,624	11,877
Number of families	1,427	1,427	1,208	3,959
Sample mean outcome	0.613	0.613	0.080	-0.012

Note: Data are from three waves of the CFPS survey (2010, 2012, and 2014). The main sample includes all households in the 2010 CFPS family data set in which (a) the couple married prior to 2010 and remain in the same marriage in 2012 and 2014; (b) the marital home is in the husband's name only; and (c) the wife was born after 1954 (less than 60 years old in 2014).

Dependent variables are listed in column titles. Panel A reports regression results using a dummy variable on female (male) employment status. Panel B uses a dummy variable on female (male) alcohol consumption, which takes value one if the individual consumes alcohol at least three times a week. In Panel C, the sample includes children aged 2-12 in 2010. The dependent variable measures annual expenditure on a child's additional fees, such as for extracurricular activities and after-school tutoring, in thousands of yuan. Panel C additionally controls for child's age. In Panel D, we construct summary indexes of female bargaining power, following the procedure in Anderson (2008). Index 1 combines data on all five outcomes: *female employment*, *male employment*, *female alcohol consumption*, *male alcohol consumption*, and *expenses on child's education*; Index 2 combines the first four outcomes. Columns (1), (3), (5), (7), and (9) control for family and year fixed effects. The other columns additionally control for the couple's ages, number of children, size of family, and years since marriage, as well as their interactions with year fixed effects. In all regressions, the treatment group is the families in which the marital home was purchased prior to marriage and was in the husband's name only. The omitted family type is a family in which the marital home was purchased after marriage and was in the husband's name only. Robust standard errors are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

TABLE 4 Heterogeneous Analysis

Dependent Variable:	**Employment**		**Alcohol Consumption**		**Child's**
	Female	**Male**	**Female**	**Male**	**Education**
	(1)	(2)	(3)	(4)	(5)
A. Has a Mortgage					
Before Marriage × After 2011	-0.0238	-0.0252	0.0176	0.0169	-0.4403***
	(0.0340)	(0.0247)	(0.0172)	(0.0372)	(0.1607)
Observation	3,366	3,366	2,859	2,859	1,158
Number of families	1,122	1,122	953	953	386
Sample mean outcome	0.794	0.918	0.035	0.325	0.504
	Employment		**Alcohol Consumption**		**Child's**
	Female	**Male**	**Female**	**Male**	**Education**
	(6)	(7)	(8)	(9)	(10)
B. Fully Paid					
Before Marriage × After 2011	0.0480**	-0.0333**	0.0030	0.0348	-0.1729
	(0.0206)	(0.0145)	(0.0094)	(0.0216)	(0.1362)
Observation	10,257	10,257	9,018	9,018	3,123
Number of families	3,419	3,419	3,006	3,006	1,041
Sample mean outcome	0.757	0.907	0.030	0.335	0.653
Family fixed effects	YES	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES	YES
Family characteristics	YES	YES	YES	YES	YES
Year fixed effects × Family characteristics	YES	YES	YES	YES	YES

Note: Data are from three waves of the CFPS survey (2010, 2012, and 2014). The main sample includes all households in the 2010 CFPS family data set in which (a) the couple married prior to 2010 and remain in the same marriage in 2012 and 2014; (b) the marital home is in the husband's name only; and (c) the wife was born after 1954 (less than 60 years old in 2014).

This table reports estimation results from Equation (1) for families with a mortgage balance in 2010 (Panel A) and families with fully paid-for homes by 2010 (Panel B). Dependent variables are listed in column titles. In all regressions, the treatment group is families in which the marital home was purchased prior to marriage and was in the husband's name only. The omitted family type is a family in which the marital home was purchased after marriage and was in the husband's name only. All columns control for family fixed effects, year fixed effects, family characteristics (the couple's ages, number of children, size of family, and years since marriage), and the interactions between family characteristics and year fixed effects. Robust standard errors are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

TABLE 5 Robustness: Attrition

Dependent Variable:	**Divorce**		**Nonresponse**		**Attrition Combined**	
	2012	**2014**	**2012**	**2014**	**2012**	**2014**
	(1)	(2)	(3)	(4)	(5)	(6)
Before Marriage	0.0012	0.0014	-0.0067	-0.0061	-0.0055	-0.0027
	(0.0010)	(0.0024)	(0.0106)	(0.0111)	(0.0107)	(0.0117)
Family characteristics	YES	YES	YES	YES	YES	YES
Number of families	5,859	5,859	5,859	5,859	5,859	5,859
Sample mean outcome	0.002	0.005	0.106	0.118	0.108	0.123

Note: Data are from three waves of the CFPS survey (2010, 2012, and 2014). The main sample includes all households in the 2010 CFPS family data set in which (a) the couple married in 2010; (b) the marital home is in the husband's name only; and (c) the wife was born after 1954 (less than 60 years old in 2014).
The dependent variable is a dummy variable on attrition in a certain year. Column (1): a dummy that takes value one if an individual divorced in 2012; (2) a dummy variable on divorce in 2014. Column (3): a dummy that takes value one if the individual observation was missing in 2012; (4) a dummy on nonresponse in 2014. Columns (5) and (6) use attrition dummies that equal one if the individual divorced or was missing in 2012 and 2014, respectively. In all regressions, the treatment group is the families in which the marital home was purchased prior to marriage and was only in the husband's name. The omitted family type is a family in which the marital home was purchased after marriage and was in the husband's name only. Robust standard errors are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

TABLE 6 Robustness: Extended Control Group

Dependent Variable:	A. Employment			
	Female		Male	
	(1)	(2)	(3)	(4)
Before Marriage × After 2011 (β_1)	0.0513***	0.0338**	-0.0037	-0.0235**
	(0.0145)	(0.0164)	(0.0102)	(0.0115)
Observations	15,696	15,696	15,696	15,696
Number of families	5,232	5,232	5,232	5,232
Sample mean outcome	0.756	0.756	0.904	0.904
	B. Alcohol Consumption			
	Female		Male	
	(5)	(6)	(7)	(8)
Before Marriage × After 2011 (β_1)	0.0091	0.0073	0.0409***	0.0289*
	(0.0059)	(0.0076)	(0.0148)	(0.0175)
Observations	13,800	13,800	13,800	13,800
Number of families	4,600	4,600	4,600	4,600
Sample mean outcome	0.031	0.031	0.334	0.334
Family fixed effects	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES
Family characteristics	NO	YES	NO	YES
Year fixed effects × Family characteristics	NO	YES	NO	YES
	C. Expenses on Child's Education		D. Female Bargaining Power	
			Index 1	Index 2
	(9)	(10)	(11)	(12)
Before Marriage × After 2011 (β_1)	-0.2118**	-0.2737***	-0.1876***	-0.1079***
	(0.0844)	(0.0907)	(0.0652)	(0.0414)
Family fixed effects	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES
Family characteristics	NO	YES	YES	YES
Year fixed effects × Family characteristics	NO	YES	YES	YES
Observations	4,923	4,923	4,224	13,800
Number of families	1,641	1,641	1,408	4,600
Sample mean outcome	0.679	0.679	0.086	-0.013

Note: Data are from three waves of the CFPS survey (2010, 2012, and 2014). This table reports regression results using an expanded sample, which now includes all households in the 2010 CFPS family data set in which (a) the couple married prior to 2010 and remain in the same marriage in 2012 and 2014; (b) the couple own the marital home, regardless of the name(s) on the title; and (c) the wife was born after 1954 (less than 60 years old in 2014). Dependent variables are listed in column titles. In all regressions, the treatment group is the families in which the marital home was purchased prior to marriage and was in the husband's name only. The omitted family type is a family in which the marital home was purchased after marriage, regardless of the name(s) on the title. Robust standard errors are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

TABLE 7 Robustness: Working Hours

Dependent Variable:	**Annual Hours Worked**		**Restriction to Nonzero Hours**	
	Female	**Male**	**Female**	**Male**
	(1)	(2)	(3)	(4)
Before Marriage × After 2011 (β_1)	0.1084**	-0.0688	0.0683	-0.1143*
	(0.0546)	(0.0558)	(0.0587)	(0.0590)
Family fixed effects	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES
Family characteristics	YES	YES	YES	YES
Year fixed effects × Family characteristics	YES	YES	YES	YES
Observations	11,958	11,556	10,209	10,074
Number of families	3,986	3,852	3,403	3,358
Mean outcome	1.359	2.004	1.403	2.071

Note: Data are from three waves of the CFPS survey (2010, 2012, and 2014). The main sample includes all households in the 2010 CFPS family data set in which (a) the couple married prior to 2010 and remain in the same marriage in 2012 and 2014; (b) the marital home is in the husband's name only; and (c) the wife was born after 1954 (less than 60 years old in 2014).
The dependent variable is the annual hours worked (in thousand hours). Columns (1) and (2) report regression results using the annual working hours (in thousand hours) for females and males as dependent variable. Columns (3) and (4) use nonzero working hours as the dependent variable. In all regressions, the treatment group is families in which the marital home was purchased prior to marriage and was in the husband's name only. The omitted family type is a family in which the marital home was purchased after marriage and was in the husband's name only. Robust standard errors are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

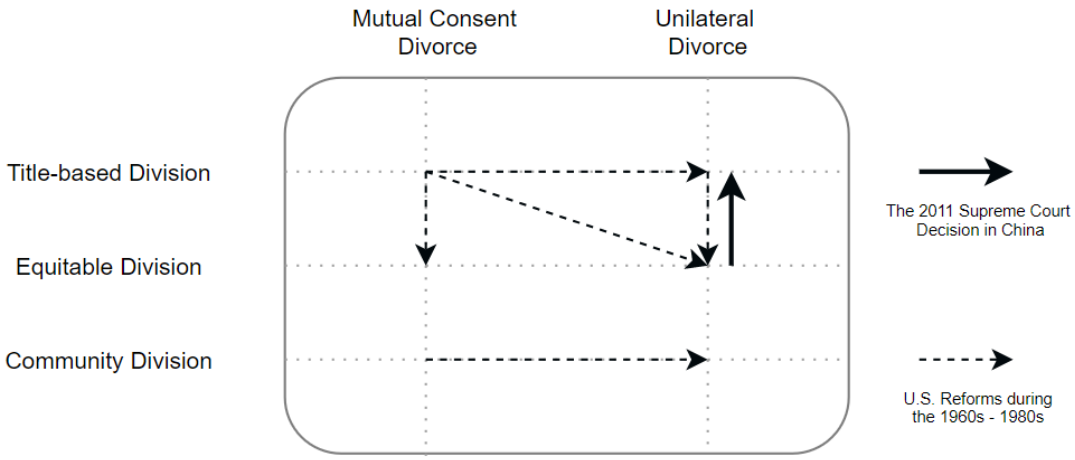

FIGURE 1
Changes in Marriage Law in China and the U.S.

Notes: Marriage laws governing divorce consider two dimensions: the grounds for divorce (columns) and the property division regime (rows). The solid arrow indicates the direction of the Chinese legal change in 2011. This change effectively shifts the premarital housing property division regime from equal-division to title-based under a quasi-unilateral divorce. The dashed arrows present the direction of U.S. marriage law reforms across states and over time during the 1960s to 1980s. These changes in the U.S. do not generally apply to any premarital assets. Many studies we review and compare in this paper exploit reforms in U.S. law in the directions indicated by the dashed arrows. See, for example, Stevenson and Wolfers (2006), Stevenson (2007), and Voena (2015).