

Female Financial Portfolio Choices and Marital Property Regimes

Lidia Cruces*, Isabel Micó-Millán[¶] and Susana Párraga[§]

July 16, 2024

Abstract

This paper studies the relationship between married couples' portfolio choices and property division rules. Using rich household survey data, we exploit the regional variation in marital laws in Spain to estimate the causal effects of property division rules on household financial investment. We find that separate-property couples hold riskier financial portfolios than community-property ones when wives lead household finances. To rationalize this gap in risky assets holdings, we develop a financial portfolio choice model where couples are subject to divorce risk but differ in their property division rule and the gender of the spouse making financial decisions. A model featuring sufficiently high dissolution costs of marital assets for community-property wives can replicate the empirical estimates. High dissolution costs of marital assets upon divorce reduce the outside option for community-property spouses, encouraging precautionary savings in the form of safe assets during marriage compared to their separate-property counterparts who bear no cost. Higher partner savings transfers in divorce attenuate this mechanism, while low-income levels reinforce it.

JEL: D14, G11, J12, J16, K36

Keywords: Personal Finance, Portfolio Choice, Marriage, Gender, Family Law

The views expressed in this manuscript are those of the authors and do not necessarily represent those of the Bank of Spain. We are genuinely grateful to Cristina Barceló for running our codes at the Bank of Spain since the information on households' region of residence in the EFF is confidential. We thank Juanjo Dolado, Andrés Erosa, Luisa Fuster, Carlo Galli, Evi Pappa, Telmo Pérez-Izquierdo, and Felix Wellschmied for their helpful comments. We also thank participants at the University Carlos III, 2021 SAEe Conference, Bank of Spain, ENTER Jamboree 2022, 6th Household Finance Workshop Goethe University, the University of Stockholm, CEMFI-BdE Research Workshop 2023, and EAYE Conference 2024 for useful comments and discussion.

*Goethe University Frankfurt, cruces@econ.uni-frankfurt.de ;

[¶]Bank of Spain, isabel.mico@bde.es ;

[§]European Central Bank, susana.parraga_rodriguez@ecb.europa.eu

1 Introduction

The marital property regime is a key determinant of the economic nature of marriage. In most Western legal systems, the degree of shared ownership of assets acquired during the marriage defines two broad types of marital property regimes: separate and community property. In separate property, each spouse maintains sole ownership of assets accumulated during the marriage and takes them upon dissolution. Contrary, in community property, most assets acquired during the marriage become jointly owned and split between spouses if the marriage ends.¹ The economic literature has emphasized the type of marital property regime having relevant implications for savings decisions mainly through two channels. First, property division rules affect married couples' incentives to save by determining the allocation of spouses' savings *ex-post* marriage (Voena, 2015). While separate property limits the ability to tap into the partner's savings, community property regulates that the common pool of assets accumulated during marriage must be shared in case of divorce, irrespective of who contributed the most to its acquisition. The differences in the sharing rule of marital savings upon divorce implied by these two regimes can distort spouses' optimal savings decisions during the marriage, as spouses can differ in their contribution to household income or consumption. Second, property division rules also affect the economic cost of terminating the marriage (Imre, 2023). Unlike separate property, community property entails a mandatory dissolution process involving an inventory of the common net assets, which is costly in terms of time and money and raises the cost of divorce under this regime.

An aspect that has received less attention in the literature is how property division rules interact with couples' financial portfolio choices. This paper fills this gap by investigating the impact of property division rules on household financial investment. The Spanish institutional setting serves as an ideal testing ground to address this question as the marital property regime law is regulated at the regional level, resulting in variation in the default rules across the Spanish regions. Separate property is the default regime in Catalonia and the Balearic Islands, while some form of community property is the default in the rest of the regions. By means of an instrumental-variable (IV) strategy, we exploit this regional variation in marital law in combination with rich survey data from the Spanish Survey of Household Finances (or EFF for its acronym in Spanish) to provide causal estimates of the effects of property division rules on couples' financial portfolio choices. The EFF provides information on Spanish households' wealth, debt, and demographics. Particularly relevant to our study, it contains detailed information on household financial investments by asset

¹In Spain, under community property, labor income and profits earned by either spouse belong to the pool of commonly owned assets, while inheritance, gifts, and assets bought before marriage remain separate property.

class (i.e., bank deposits, shares, bonds, etc.) and on the marital property regime when households consist of married couples.

We find that separate-property couples take significantly more financial risk when wives are most knowledgeable about household finances. In particular, we find that separate property couples are 8.5% more likely to participate in risky assets than their counterparts married under community property when females are the household heads. The definition of the household head in the EFF makes it very likely that this household member is the primary decision-maker regarding the household economy and finances. Specifically, the household head is the spouse most knowledgeable about the household economy and investments, being able to give detailed information about household wealth and debt holdings. We also find that separate-property couples hold more wealth in risky assets than those married in community property. On average, couples married under separate property hold a risky assets share 3 percentage points higher than couples married under community property do when wives take a primary role in household financial investments.

Our identification strategy relies on assuming that the marital property regime affects financial outcomes only through the induced variation resulting from couples adopting the default regime in their region. In Spain, the regional variation in default property regimes emanates from old legal traditions: Catalonia and the Balearic Islands adopted separate property during the Roman Empire's rule, while the other Spanish regions acquired community property from the Visigothic Kingdom law system. Therefore, it is not unreasonable to think that the same legal traditions might have shaped cultural norms or regional economic development differently between the two groups of regions over the course of history. We show that our empirical findings remain stable and strongly significant when controlling for regional economic variables, such as GDP or unemployment, and when comparing couples in Catalonia and Madrid, the two most economically developed regions in Spain. We also show that our results are robust to controlling for differences in risk aversion, financial sophistication, or gender norms promoting female financial independence, as well as excluding assets outside the community property (i.e. inheritances) or using region of birth instead of region of residence as an IV.

To rationalize the empirical findings, we develop a tractable two-period model of financial portfolio choice where couples differ in their marital property regime and the gender of the spouse making financial decisions. Households consist of two spouses born married and face an exogenous probability of divorce. We model the household head as the spouse most knowledgeable of household finances who decides the level of consumption, which is public within the household, and her/his savings in safe *and* risky financial assets given the partner's savings decisions and their expectations

about both spouses' future labor income, asset returns, and marital status. We allow spouses to differ in their income profile parameters by gender and marital property regime. Household head's partners can also differ in the total amount of savings across regimes, as they save an exogenous fraction of their income. However, we restrict preferences and the probability of divorce to be the same across household types. In the model, property division rules dictate the asset allocation upon divorce and the corresponding dissolution costs. When separate property couples divorce, spouses take their assets according to the title of ownership and face no dissolution cost. In contrast, community property couples incur dissolution costs as total household savings must be split between spouses. We introduce this dissolution cost assuming that an exogenous fraction of total permanent household income is destroyed in the event of divorce (Mazzocco, 2007; Mazzocco et al., 2014). Divorce represents a source of financial risk in the model because it requires couples to split total household assets, resulting in a state with lower income levels and higher income risk. However, the strength of the precautionary savings motive differs across marital property regimes, as they directly affect spouses' outside option by regulating the distribution of assets upon marital dissolution and the associated costs.

We calibrate the model to match key moments of Spanish married couples' financial behavior. The model matches well both the targeted participation levels in risky assets for separate property couples, i.e. the extensive margin of portfolio choice, and the gap in the risky assets shares between marital property regimes, i.e. the intensive margin. Moreover, the model fits qualitatively the untargeted participation gap in financial markets between marital property regimes and predicts a relative savings-to-income ratio between separate and community property couples close to the empirical estimates.

Counterfactual simulations show that the dissolution costs of marriage are the key ingredient to generating positive gaps in risky financial investment between separate and community property couples. Intuitively, relative to separate property, higher dissolution costs for community property induce spouses to hold higher levels of savings and to allocate a higher fraction of their portfolio to safe assets to smooth consumption. Thus, our empirical findings are consistent with a model where community-property female household heads face higher dissolution costs relative to their income than male household heads. Potential lower savings transfers from their partner upon divorce and lower income levels reinforce this precautionary savings motive for community-property household heads. However, these alternative mechanisms cannot explain alone the estimated marital property regime gaps in risky financial investment.

In the context of rising divorce rates in many countries, the data shows that women are exposed to greater labor income volatility and continue to accumulate less

financial wealth than men, especially in risky assets that tend to deliver higher returns (see, e.g., [Global Gender Gap Report, 2022](#)). Our research highlights the role of institutions in incentivizing household savings and the possibilities for self-insurance against economic shocks brought about by greater diversification in household investment portfolios. A marital property regime that encourages the individual management of investment portfolios by defining the legal ownership structure of assets individually and reducing the dissolution costs of marriage might encourage women’s participation in financial markets. These changes, in turn, could potentially help reduce the gender financial wealth gap.

Related literature. A limited but growing literature has explicitly studied the implications of different marital property regimes for various household economic outcomes. [Brassiolo \(2013\)](#), [Piazzalunga \(2016\)](#), [Imre \(2023\)](#) and [Huang et al. \(2021\)](#) examine empirically how divorce laws interact with different marital property regimes in shaping households economic behavior. We contribute to this literature by studying how property division rules shape household financial decisions and portfolio choices, including risky assets. The closest study investigating the effect of different marital property regimes on household outcomes is [Imre \(2023\)](#). She also exploits the regional variation in default marital property regime law in Spain to investigate the effects of property division rules on a wide range of marital-related outcomes. She builds on a simple model of property rights to derive testable hypotheses. Her model predicts that separate property fosters general investments (e.g., employment, asset accumulation) and less relationship-specific investments (e.g., children, homemaking) as the former generates higher returns in the outside option. However, her empirical estimates render no effect of property division rules on wealth accumulation. Differently from this work, we develop and calibrate a household portfolio choice model where couples differ in their property regime and are subject to uninsurable income and divorce risks. In our framework, returns on financial assets follow the same process during and *ex-post* marriage independently of the marital property regime. Still, division rules can affect portfolio choices if they modify the cost of divorce by regulating different sharing rules for assets or influencing the dissolution costs of common marital savings. Our model predicts higher savings accumulation and safer portfolios for spouses married under community property if divorce is sufficiently costly. This self-insurance incentive becomes particularly strong for spouses earning low income and/or subject to high-income risk.

This paper broadly complements the theoretical literature studying the interaction of marital transition dynamics and household savings behavior (see [Yamaguchi et al., 2014](#); [Voena, 2015](#); [Cubeddu and Ríos-Rull, 2003](#); [De Nardi et al., 2021](#)). Our paper is closely related to [Voena \(2015\)](#), who studies the interaction between property

division rules and divorce laws in the US through the lenses of a dynamic collective model of intra-household decision-making. Exploiting panel variation in U.S. divorce and property division laws, she finds that the parameter estimates of her model are consistent with a collective model where wives' share of household resources in marriage is low. This implies that women benefit the most from laws that impose an equal division of property upon divorce, which gives community-property couples incentives to increase total asset accumulation and reduce wives' labor supply compared to separate property. Differently from [Voena \(2015\)](#), our theoretical framework nests into the class of unitary models of household decision-making but explicitly models how property division rules shape couples' financial portfolio allocation between safe and risky assets. In this respect, we contribute to the literature studying how marital dynamics affect household portfolio allocation. [Love \(2010\)](#), [Hubener et al. \(2016\)](#) and [Bacher \(2021\)](#) develop a joint framework of household structure and financial portfolio choice to study how couples and singles make portfolio choices following family shocks such as divorce or/and marriage. Our contribution here relies on introducing two types of property division rules in a theoretical portfolio choice framework and studying their implications for married couples' risky financial investments.

Our paper also contributes to the growing economic literature on gender and finance. In this literature, there is consensus regarding the fact that men invest more and less conservatively in financial assets than women because of differences in risk aversion ([Bajtelsmit and Bernasek, 1996](#); [Croson and Gneezy, 2009](#); [Dohmen et al., 2011](#)), financial literacy ([Van Rooij et al., 2011](#); [Lusardi and Mitchell, 2014](#); [Hospido et al., 2021](#)) or self-confidence ([Barber and Odean, 2001](#); [Bucher-Koenen et al., 2017](#); [Klapper and Lusardi, 2020](#)). More recently, the role of traditional gender norms has also been highlighted as another potential driver behind the gender gap in financial investment ([Ke, 2021](#)). [Guiso and Zaccaria \(2021\)](#) also show that more egalitarian norms increase household participation in financial markets, equity holdings, and asset diversification in Italy. Instead, we examine the impact of marital property regimes on household financial investment decisions, given the gender differences found in the previous literature regarding psychological traits, risk-taking, or social norms.

The paper is organized as follows. Section 2 covers the Spanish institutional background. Section 3 describes the data. Section 4 describes the empirical approach to examine the role of marital property regime on household financial behavior and presents the results. Sections 5-8 describe the quantitative model, the calibration strategy, and the model results. Section 9 concludes.

2 Institutional Background

The marital property regime defines the legal ownership structure of assets acquired during the marriage. In doing so, property division rules implicitly determine (i) the division rules of couples' property upon marriage dissolution (due to divorce or death) and (ii) the cost of terminating marriage.

Sharing rule and dissolution cost of marital assets upon divorce. Under community property, assets acquired during the marriage are jointly owned and, therefore, are split equally between the spouses upon marriage dissolution. By contrast, separate property spouses retain full ownership of the assets they have acquired during the marriage in case of divorce. Community and separate property imply different costs of distributing marital assets between spouses ex-post marriage (i.e., divorce or death). Unlike separate property couples, community property spouses are legally required to dissolve their regime if they divorce. The procedure requires making an inventory and valuing all common assets and liabilities, which requires both spouses' approval. Then, the ownership of half the net value of the shared pool of assets can be assigned to each spouse.² Therefore, divorce can turn into a more costly and lengthier procedure for couples married under community property compared to those married under separate property. Although only community property spouses face dissolution costs of marriage, liquidation costs are not necessarily different between marital regimes. These liquidation costs are particularly relevant for the case of housing. In Spain, around 85% of working couples report to be homeowners, and the vast majority of them (around 90%) report to share ownership of household assets.³ Selling a property (bought jointly) generally implies appraisal costs that apply to both regimes, independently from the ownership shares of spouses.⁴

Spanish regional marital property law. In Spain, marital property regimes are regulated at the regional level. Figure 1 shows that two marital property regimes coexist in Spain. While Catalonia and the Balearic Islands have separate property as their default property regime, some form of community property applies in the rest of the regions.⁵ The default marital property regime of spouses' region of residence

²This procedure needs to be done before a public notary. The average cost ranged between 1,000 and 3,000 euros in 2022, depending on the complexity of the judicial case and the volume of assets. See [here](#) and [here](#).

³Data from the Spanish Survey of Households Finances, 2002-2021.

⁴In addition, upon dissolution of a marriage, regardless of the property regime, the economic or housing need of one of the spouses could lead to the use of the property to be granted, even if for a limited time, in favor of the spouse with fewer resources (in our sample usually women). In divorce cases where only one parent is awarded custody of the children (until recently usually women), she may also retain the use of the family residence, albeit for a limited time (see article 96 of the Spanish Civil Code and the discussion in [Alonso Hernández \(2019\)](#)).

⁵The Valencian Community, as an exceptional case, changed its default regime from community to separate property during the period 2008-2016.

applies unless they agree on a different division rule signing a prenuptial agreement (*Capitulación Matrimonial* in Spanish). Prenuptial contracts can be signed ex-ante or ex-post marriage, can be modified at any time during the marriage if both spouses agree and their monetary cost is relatively small (about 60 euros in 2013).⁶ If a separate property contract is signed ex-post marriage, the price is usually higher as the cost is proportional to the value of the common pool of assets to be split. Despite the simplicity of the procedure, most marriages merely adopt the default property regime in their region (See Figure A.1a), and, if any, they opt out from community property (See Figure A.1b).⁷ Finally, it is worth noticing that despite regions having different default marital property regimes, they feature similar marriage and divorce dynamics over time (See Figure A.2).



Figure 1: Default Marital Property Regimes in Spain

Notes: This map shows the regional variation in default marital property regime across Spanish regions. Separate-property regions, represented in blue, include Catalonia and the Balearic Islands. Community-property regions, shown in green, encompass the remaining areas. The Valencian Community, depicted in grey, adopted a separate property regime as the default between 2008 and 2016 and a community property regime during the remaining years.

3 Data

We use household-level data from the Spanish Survey of Household Finances (EFF), which is conducted every three years by the Bank of Spain and spans from 2002 to 2020 (7 waves in total). The survey reports detailed information on households' income, wealth, portfolio composition, and a rich set of socio-economic characteristics

⁶A web search for this notary service in 2023 yielded costs between 80 and 100 euros. See [here](#).

⁷The trends for the evolution of prenuptial contracts to adopt separate property by region are very similar to the national average.

based on personal interviews. The EFF is well-suited to evaluate the different margins of response of household financial investment as it oversamples the rich (Bover, 2008), who is the group of the population that hold financial wealth in risky assets (Carroll, 2000). We exploit particular features of the EFF, which are rarely included in surveys reporting information about household wealth.

Marital property regime and financial outcomes. The survey includes information on the marital property regime of couples, which is not available in other surveys such as the Bank of Italy’s Survey of Households Income and Wealth (SHIW) or the Federal Reserve’s Survey of US Consumer Finances (SCF). We restrict the estimation sample to married couples with both spouses employed so that both contribute to household income.⁸ We drop self-employed workers because their financial decisions are most likely to be determined by other motives than the general population. For instance, self-employed individuals tend to opt for the separation of property because this regime provides a way of sheltering a fraction of household assets from the risk of bankruptcy. Table 1 presents summary statistics of household financial outcomes and other household-level characteristics by marital property regime. About 76% of couples are married under community property. This is not surprising since all Spanish regions have community property as the default marital property regime except for two. We categorize fixed-income securities, savings, and checking accounts as safe financial assets, while shares and mutual funds are risky financial assets (see Table B.1 in the Appendix). As mutual funds can have different risky profiles, we exclude debt funds from the sample.⁹ Separate property couples’ average participation rate in risky assets and the risky portfolio share is higher. In addition, these couples are wealthier and earn a higher income than their counterparts married under community property. However, they barely differ in homeownership rates.

Household head. The definition of the household head in the EFF makes it very likely that he or she is the most knowledgeable about the household economy and finances. The specific definition provided to households reads: “the person who knows more about the economy and finances of the household living at this address”.¹⁰ Thus, the household head is the person who is more informed about the household’s finances, i.e., household income, expenditures, investments, assets, etc. It is not simply a household member or the breadwinner but the person who knows the most about the household’s finances. By contrast, the Survey of Consumer Finances (SCF)

⁸Civil union couples are excluded from the sample because marital property regime laws do not apply to them. They represent around 6% of two-earner couples.

⁹The EFF asks households about the type of mutual funds they have invested in. The possible answers are: guaranteed investment funds, equity funds, debt funds, hybrid funds, and global funds. Guaranteed investment funds and global funds can include both equity and debt instruments.

¹⁰Like the EFF, the Italian Survey on Household Income and Wealth (SHIW) also defines the household head as “the person primarily responsible for or most knowledgeable about the household budget”. See [here](#).

Table 1: Household Summary Statistics

	Mean	St. dev.	Separate	Community
Panel A. Socioeconomic characteristics				
Separate property	0.24	0.43		
Home-ownership				
Rent	0.08	0.28	0.08	0.09
Ownership	0.88	0.33	0.87	0.88
Other	0.04	0.19	0.05	0.03
Household Size	3.56	0.99	3.56	3.56
Income (thousands eur)	67.87	78.30	90.95	60.56
Net wealth (thousands eur)	576.54	3414.13	1126.47	370.90
Panel B. Financial Variables				
<i>Financial Variables</i>				
Participation risky assets	0.30	0.46	0.39	0.27
% Risky assets (Total financial assets)	10.34	22.15	15.34	8.75
Total financial wealth (1000 euros)	141.48	2072.3	89.36	514.27

Notes: This table shows summary statistics for two-spouse households characteristics and by marital property regime of the household head. The sample includes data from the 2002-2020 waves of the Spanish Survey of Household Finances, restricted to employed two-spouse households. Self-employed households are excluded from the sample. Observations: 4119.

administered by the Federal Reserve of the United States assumes the household head “to be either the male in a mixed-sex couple or the older individual in the case of a same-sex couple”.¹¹

Table 2 reports summary statistics of household heads. Wives take a more prominent role in managing household finances in about one-third of households, independently of the marital property regime. On average, the spouse most knowledgeable about the household finances is 47 years old and more educated, especially when the wife is the household head. Looking at the differences between the two types of regimes, we can observe that the household head in separate-property couples is more educated and more likely to work in the financial sector regardless of gender. Male household heads earn about twice as much as their spouses, while female household heads earn less. Only 11% of household heads report being the main shareholders of household assets, meaning that the other 89% report that the ownership of the majority of household assets is shared with their spouse.

4 Empirical Strategy

To investigate whether property division rules in marriage affect couples’ risky financial investment, we rely on an instrumental variable strategy. The choice of marital property regime is potentially endogenous, as spouses can opt out of the

¹¹See [here](#).

Table 2: Household Summary Statistics - Household head

	Mean	St. dev.	Separate		Community	
Female	0.34	0.47	0.33		0.35	
			Female	Male	Female	Male
Age	47	8.62	45	47	45	47
Education						
Less than high-school	0.23	0.42	0.25	0.15	0.25	0.24
High-school	0.34	0.48	0.19	0.31	0.37	0.35
College	0.43	0.49	0.50	0.54	0.38	0.41
Occupation in financial sector	0.05	0.22	0.08	0.09	0.05	0.04
Main owner of the assets	0.11	0.32	0.06	0.09	0.21	0.22
Wage ratio bw spouses	1.59	1.89	0.86	2.21	0.80	1.92
Education ratio bw spouses	1.11	0.48	1.18	1.04	1.26	1.04
Age ratio bw spouses	1.03	0.10	0.97	1.06	0.96	1.06

Notes: This table shows summary statistics for two-spouse households characteristics and by marital property regime of the household head. Ratios are calculated as the fraction of each outcome for the household head over their spouse. The sample includes data from the 2002-2020 waves of the Spanish Survey of Household Finances, restricted to employed two-spouse households. Self-employed households are excluded from the sample. Observations: 4119.

default regime by signing prenuptial contracts. [Frémeaux and Leturcq \(2020\)](#) show using French administrative data that separate property could be used strategically by the wealthiest spouse to protect their wealth in case of divorce in unequal partnerships. If wealthier couples self-select into separate property, regressing directly financial participation in risky assets on a separate property dummy would overestimate the effects of this property division rule on risky financial investment.

In our sample, 86% of households living in community-property regions adopted the default regime. This means that around 14% of couples in these regions changed their marital property regime to separate property. [Figure B.1](#) in the Appendix disaggregates the share of households opting out of community property by net wealth percentile. It shows that couples in the highest percentile are more likely to choose a separate property marital regime. To avoid this source of endogeneity in our setting, we exploit the regional variation in default regimes across Spanish regions and use the region of residence as an instrument for marital property regime as follows:

$$\begin{aligned}
 Y_{i,t} &= \beta_0 + \beta_1 \text{Sep. Property}_{i,t} + \delta' X_{i,t} + \lambda_t + v_{i,t} \\
 \text{Sep. Property}_{i,t} &= \alpha_0 + \alpha_1 \text{Region}_{i,t} + \gamma' X_{i,t} + \lambda_t + \varepsilon_{i,t}
 \end{aligned} \tag{1}$$

where $Y_{i,t}$ represents the different outcomes of interest, while $\text{Sep. Property}_{i,t}$ equals 1 if household i is married under separate property and 0 if married under community property, and $\text{Region}_{i,t}$ equals 1 if the couple lives in Catalonia or the Balearic Islands and 0 if otherwise. The main identifying assumption is that couples' region of

Table 3: First-stage Regression

	(1) Separate Property
Regions with Default Separate Property	0.584*** (0.014)
Household Characteristics	Yes
Survey FE	Yes
F-value	131.34
Prob > F	0.000
Observations	4025

Notes: This table provides results of the first-stage regression of the separate-property variable on a dummy variable that takes a value equal to 1 when the couple’s region of residence is Catalonia or the Balearic Islands. The sample includes all two-earner married households in 2002-2020. We exclude households living in the Valencian Community since this region changed the default marital property regime law between 2008 and 2016. The household characteristics refer to the following controls: household income, number of individuals living in the household, household head’s age, education, homeownership, occupation in the financial sector, and comparative proxies between spouses (education, age, and wage ratios).

residence is correlated with their marital property regime choice but uncorrelated with household financial portfolio choices. We additionally control for a full range of household socio-economic characteristics, X_{it} , including household income, number of individuals living in the household, household head’s age, education, homeownership, occupation in the financial sector, and comparative proxies between spouses (education, age, and wage ratios). Finally, we include survey year λ_t fixed effects to capture time trends affecting household financial investment.

4.1 Empirical Findings

Table 3 reports the first-stage results. The coefficients are positive and statistically significant, suggesting that living in Catalonia or the Balearic Islands is strongly correlated with being married under separate property. This, together with the high F-stat values, confirms the relevance of our instrument. Tables 4 and 5 present the 2SLS estimation results for risky financial investment both at the extensive and intensive margin. Interestingly, property division rules induce significant differences in portfolio choices among female-headed couples, while no significant effect is found for households led by husbands. In particular, households married under a separate property regime are 8.5% more likely to invest in risky assets than their community property counterparts when wives are the most knowledgeable about household finances (i.e., the household head). These couples also hold a share in risky asset classes up to 3.1 percentage points higher compared to couples married under community property. This implies that households married in separate property allocate, on average, 2,300 euros ($3.1\% \times 79,200$) more on risky assets in their portfolio.

Table 4: 2SLS Estimates - Participation in Risky Financial Assets

	(1) Participation Risky Assets	(2) Participation Risky Assets	(3) Participation Risky Assets
	All couples	Female Household Head	Male Household Head
Separate Property	-0.007 (0.035)	0.085*** (0.022)	-0.048 (0.043)
Mean Outcome	0.30	0.22	0.34
Households Characteristics	Yes	Yes	Yes
Survey Year FE	Yes	Yes	Yes
Observations	4025	1378	2647

Notes: This table provides 2SLS results from a model where the dependent variable is a binary variable that equals 1 if households hold wealth in risky assets (i.e., listed shares, unlisted shares, and mutual funds). The sample includes all two-earner married households in 2002-2020. We exclude from the sample couples living in the Valencian Community as this region changed its default regime during the time period considered. Standard errors (in parenthesis) are robust and clustered at the regional level. The household characteristics refer to the following controls: household income, number of individuals living in the household, household head's age, education, homeownership, occupation in the financial sector, and comparative proxies between spouses (education, age, and wage ratios).

Table 5: 2SLS Estimates - % Risky Financial Assets

	(1) Share Risky Assets	(2) Share Risky Assets	(3) Share Risky Assets
	All couples	Female Household Head	Male Household Head
Separate Property	0.067 (1.496)	3.074*** (0.940)	-1.410 (1.875)
Mean Outcome	10.33	7.23	11.94
Households Characteristics	Yes	Yes	Yes
Survey Year FE	Yes	Yes	Yes
Observations	4025	1378	2647

Notes: The sample includes all two-earner married households in 2002-2020. This table provides 2SLS results from a model where the dependent variable is the share of risky assets (i.e., listed shares, unlisted shares, and mutual funds) out of the total financial portfolio. We exclude from the sample couples living in the Valencian Community as this region changed its default regime during the time period considered. Standard errors (in parenthesis) are robust and clustered at the regional level. The household characteristics refer to the following controls: household income, number of individuals living in the household, household head's age, education, homeownership, occupation in the financial sector, and comparative proxies between spouses (education, age, and wage ratios).

Appendix Tables C.1 and C.2 present the OLS estimates of Equation 1. As can be inspected, the results for participation in financial risky assets are very similar in terms of significance and magnitude for both types of households. However, without correcting for the endogeneity bias, the estimated coefficient for the effect of property

division rules is positive and statistically significant for male-headed households when the dependent variable is the share of risky assets.

4.2 More Empirical Results

Table 6 shows the 2SLS estimates when the dependent variable is the savings-to-income ratio. Savings are computed as the difference between annual labor earnings and consumption of durables and non-durable goods in the survey. We find that couples married under separate property have 4.3 p.p lower savings rates than their counterparts in community property. In contrast with previous results on the portfolio composition, the impact of property division rules on the savings rate gap is negative for both male-headed and female-headed couples. These results are consistent with [Voena \(2015\)](#), who find asset accumulation is higher in the US states that imposed equal distribution of assets after the introduction of unilateral divorce.

Table 6: 2SLS Estimates - Savings-to-income ratio

	(1) Savings-to-income Ratio	(2) Savings-to-income Ratio	(3) Savings-to-income Ratio
	All couples	Female Household Head	Male Household Head
Separate Property	-0.043*** (0.011)	-0.061*** (0.020)	-0.033*** (0.012)
Mean Outcome	0.58	0.57	0.59
Households Characteristics	Yes	Yes	Yes
Survey Year FE	Yes	Yes	Yes
Observations	4019	1377	2642

Notes: The sample includes all two-earner married households in 2002-2020. This table provides 2SLS results from a model where the dependent variable is the savings-to-income ratio. Savings are computed as the difference between annual labor earnings and annual consumption of durable and non-durable goods. We exclude from the sample couples living in the Valencian Community as this region changed its default regime during the time period considered. Standard errors (in parenthesis) are robust and clustered at the regional level. The household characteristics refer to the following controls: household income, number of individuals living in the household, household head's age, education, homeownership, occupation in the financial sector, and comparative proxies between spouses (education, age, and wage ratios).

4.3 Robustness Checks

In our context, the exclusion restriction implies that property division rules affect financial outcomes only through the induced variation resulting from couples adopting the default regime in their region of residence. The most relevant threat to identification in our setting is that regional variation in default regimes captures cultural differences that might affect household financial behavior beyond property division rules themselves. The multiple marital property regimes result from different legal traditions: Catalonia

and the Balearic Islands adopted separate property during the Roman Empire’s rule, while other Spanish regions acquired community property from the Visigothic Kingdom law system. It is not unreasonable to think that such old legal traditions have shaped local cultural patterns or regional development differently, and this could translate into different household financial behavior.

Socio-economic and cultural controls. We exploit the information provided in the EFF survey to control for some socio-economic or cultural confounders derived from these different legal traditions. Different legal historical roots could have influenced preference towards risk and financial sophistication levels. They could have also promoted or discouraged female financial independence, which can be transmitted through family ties from generation to generation.¹² We use a variable measuring financial risk-taking as a proxy for household risk aversion, online banking as a proxy for financial sophistication, and labor supply of household heads’ mothers as a proxy for gender norms promoting female financial independence. Appendix Tables C.3 and C.4 present 2SLS estimates when controlling for risk attitudes, financial sophistication levels, and gender norms and show that our results are robust to these alternative channels.

Balanced treatment and control group. We also present the results of an exercise where we construct two comparable samples of female-headed married couples using propensity score matching. In this exercise, we use all the controls included in our baseline equation (i.e., age, education, household income, etc.) and established two groups: separate-property couples in Catalonia and Balearic Islands (treatment) and community-property couples in the rest of the regions (control). Appendix Table C.5 shows the estimates for both the gap in risky asset participation and risky assets share are statistically significant and similar to the IV estimates.

Regional controls. Additionally, Appendix Table C.6 shows that our IV estimates are also robust to controlling for regional economic variables such as GDP and unemployment rate. This exercise mitigates concerns that different legal frameworks can correlate with different economic development levels that might also affect household financial investment. We have performed two extra exercises: one where we estimate our IV model only considering female-headed households living in Madrid and Catalonia and another one where we exclude Catalonian households from the sample (see Table Appendix C.7). As can be inspected, we obtain positive and significant gaps both at the extensive and intensive margin of financial investment in two alternative exercises. Still, these results should be interpreted with caution as the sample size is small.

¹²Imre (2023) provides evidence on this channel by showing that separation of property promotes a higher female labor supply in Spain.

Using the region of birth as an IV. The Spanish Civil law establishes that couples will adopt the default marital property regime in their region of residence unless they agree on a different one by signing a prenuptial contract. In the EFF survey, there is no marriage information except the civil status, and thus, we have assumed that couples' region of residence has been the same since marriage. However, it could be the case that some couples have moved to another Spanish region after marriage, introducing measurement errors in our instrumental variable. We reproduce our main results by using the region of birth of spouses instead, which has been available in all survey waves except in 2005. Table C.8 shows that the results on participation remain robust to the use of this alternative instrument.

Assets outside community property. The Spanish law regulating community property establishes that gifts, inheritances, and assets bought before marriage remain the exclusive property of each spouse. Although the survey does not include information on pre-marital assets, it does include information on inheritances and gifts since 2008. We run additional regressions excluding those households that received any financial assets as an inheritance or gift. In this way, we first ensure that our results are not driven by financial portfolio status independent of the marital property regime. Second, we also take into account the possibility that our results are affected by including couples married in community property with financial wealth outside the common pool of marital assets. Table C.9 shows that our results are robust to this sample restriction.

Outliers. Finally, we also ensure that our results are not driven by a small proportion of female-headed households for which wives out-earn their husbands (28% in our sample). Appendix Table C.10 shows that our IV estimates are robust to restricting the sample to those couples where the wife is the second earner, but she is most knowledgeable about household finances, i.e., second earner female heads of the household.

4.4 Potential Mechanisms

The main result of the empirical analysis is that couples with wives very informed about household finances participate more in financial markets and allocate a higher fraction of their portfolio to risky assets when married with a separate marital property regime. In contrast, these differences in risky investment are negligible when husbands lead household finances. In this section, we discuss different channels that could rationalize these results.

The sharing rule and dissolution costs of marital savings in divorce. As explained in Section 2, the two property division rules imply different sharing rules and dissolution costs of marital savings. A causal interpretation of our empirical results

implies that these differences in the division rule of assets and the associated costs drive the gaps in financial investment in female-headed households. Unfortunately, it is hard to disentangle empirically how both channels shape individual portfolio choices of spouses during marriage. First, as long as the sharing rule affects each spouse’s divorce allocation, it can also alter the intra-household allocation of savings during marriage (see [Voena, 2015](#)) and the strength of the precautionary savings motive in the form of safe assets. As we neither observe individual consumption shares nor individual savings, a theoretical model would be needed to quantify the importance of this channel and its interaction with different sources of gender heterogeneity, like earnings or preferences, for instance. Second, the characteristics of the panel structure of the EFF (with gaps of 2-3 years) and the low incidence of divorce in the sample (112 couples) make it hard to provide reliable estimates of the dissolution cost of marital savings for community-property couples. Not only that but divorce dissolution costs could be confounded with liquidation costs. We try to disentangle the different types of costs estimating our baseline model in a sample of homeowners (89% of baseline sample), as we know both types of couples should face similar liquidation costs due to the need of dividing an illiquid asset in the event of divorce. [Table C.11](#) shows that the property regime gap in risky financial investment remains significant both at the extensive and intensive margin but lower in magnitude than the baseline estimate. These results point towards dissolution costs themselves being a potential driver of safer portfolios of community-property couples, which seem to affect more strongly female-headed households.

5 The Model

Motivated by the empirical facts, we build a two-period unitary household financial portfolio choice model featuring gender heterogeneity in the spouse making financial decisions. The aim of the model is to identify the channels through which different sharing rules of marital assets in divorce and associated costs affect household portfolio choices, taking into account the gender heterogeneity as we observe it in the data.

In this model, households consist of two individuals: a household head (hh) and their partner (p). Couples are assumed to be born married with a given marital property regime and a household head, without any initial asset holdings, and will live for two periods. The household head can be female or male and represents the person who ultimately makes decisions on behalf of the couple taking as given the partner’s financial choices.¹³ Thus, the definition of the household head in our model replicates

¹³Many collective models characterize household decisions as a Nash bargaining problem (see, e.g., the literature review by [Doepke and Tertilt, 2016](#)). However, if household utility derives solely from public consumption, no intra-household bargaining distribution is necessary. This avoids having to estimate intra-household bargaining weights in a setting where factors such as divorce

the survey data definition of the household member who is the most knowledgeable about the household’s finances.

In the first period, the household head observes her income shock realization and her partner’s. Next, she chooses household consumption, which is a public good, as well as her individual savings and portfolio allocation of savings between risk-free and risky assets, taking her spouse’s savings decisions as given. In the second period, couples face an exogenous probability of divorce (δ) such that they can either be married or divorced. If the marriage continues ($d = 0$), households solve the continuation planning problem of staying married. In the case of divorce ($d = 1$), the marital property regime (m) dictates the allocation of assets between spouses and the dissolution costs of marital assets. Upon divorce, community property couples ($m = c$) split total assets equally, and spouses pay a dissolution cost (K). In contrast, separate property couples ($m = s$) simply take their individual assets and pay no dissolution costs. Thus, marital property regimes matter for determining available assets and disposable income in the event of divorce.

Next, we describe the functional forms we assume for this model and present the dynamic problem households face.

5.1 Preferences

Households have time-separable constant relative risk aversion (CRRA) preferences. The period flow utility from consumption (c) is given by

$$u(c) = \frac{\left(\frac{c}{\theta(d)}\right)^{1-\gamma}}{1-\gamma} \quad (2)$$

where γ denotes the coefficient of relative risk aversion and $\theta(d)$ is an equivalence scale that adjusts for household size depending on whether households are married or divorced.¹⁴ Consumption represents the sum of individual consumption during the marriage, i.e. $c = c^{hh} + c^p$, or individual consumption in the case of divorce, i.e. $c = c^i$ for $i \in \{hh, p\}$.

laws and marital property regimes can affect the usual estimates based on observed relative incomes (Gomes et al., 2021; Chiappori et al., 2002). Our setup also captures the fact that spouses with estimated relatively weaker bargaining power due to lower earnings may do better than predicted by intra-household bargaining models (Pollak, 2022).

¹⁴Note that the model assumes the same risk aversion across genders and marital property regimes. This assumption is motivated by the robustness checks in Tables C.3 and C.4, which show that differences in risk attitudes do not explain the empirical findings.

5.2 Income Profiles

For spouse $i \in \{hh, p\}$ and marital property regime m , income y_m^i can be split into a deterministic and a stochastic component:

$$y_m^i = \bar{y}_m^i \epsilon^i \quad (3)$$

where \bar{y}_m^i represents the deterministic component specific by gender and marital property regime, and ϵ^i is the gender-specific stochastic component. In particular, we assume that the stochastic component follows an AR(1) process:

$$\ln(\epsilon^i) = \rho \epsilon^i + v^i; \quad v^i \sim \mathcal{N}(0, \sigma_i^2). \quad (4)$$

5.3 Financial Assets

Each spouse $i \in \{hh, p\}$ can invest in two assets: a riskless asset (a_s^i) and a risky asset (a_r^i). The safe asset has a constant gross return r_s , while the risky asset has a random gross return r_r . We assume the return of the risky asset follows an independent and identically distributed normal distribution $r_r \sim_{iid} N(\mu_r, \sigma_r^2)$ such that $\mu_r > r_s$. Notice that since the risky asset follows an i.i.d process, we can combine safe and risky assets into a single ‘‘cash-on-hand’’ state variable

$$a^i = (1 + r_r)a_r^i + (1 + r_s)a_s^i. \quad (5)$$

As in [Cocco et al. \(2005\)](#), we assume that each spouse faces the following borrowing and short-sales constraints:

$$a_s^i \geq 0, \quad (6)$$

$$a_r^i \geq 0. \quad (7)$$

The borrowing constraint (6) ensures that the individual’s allocation to safe assets is non-negative in all periods, preventing them from capitalizing or borrowing against future labor income. The short-sales constraint (7) ensures that the individual’s allocation to stocks is non-negative in all periods.

We further assume that the household heads’ savings cannot exceed a maximum amount (\bar{A}_m). Specifically, we assume that, at most, they can save the maximum possible realization of income:

$$a_s^{hh'} + a_r^{hh'} \leq \bar{A}_m \equiv \max(y_m^{hh}). \quad (8)$$

Following [Vissing-Jørgensen \(2002\)](#), we also assume that it is necessary to pay a fixed cost of stock market entry (Ω). This fixed cost can be understood as an entry cost to stock market participation related to the time spent understanding the risks and returns associated with stocks. To account for potential information spillovers between spouses, we assume the household head pays this cost only if their partner does not participate in the stock market:

$$\Omega_m^{hh} = \begin{cases} 0 & \text{if } a_r^{hh'} > 0 \text{ \& } a_r^{p'} = 0 \\ \Omega & \text{otherwise.} \end{cases} \quad (9)$$

Finally, motivated by [Benzoni et al. \(2007\)](#), we further assume that the household head must earn above an income threshold (χ) to participate in the stock market:

$$a_r^{hh'} = \begin{cases} 0 & \text{if } \bar{y}_m^{hh} \leq \chi \\ a_r^{hh'} & \text{otherwise.} \end{cases} \quad (10)$$

5.4 Budget Constraint

The per-period budget constraint for married couples is given by:

$$c + \sum_i a_s^{i'} + \sum_i a_r^{i'} = \sum_i y_m^i + \sum_i a^i - \Omega \mathbb{I}_{a_r^{hh'} > 0 \text{ \& } a_r^{p'} = 0}, \quad (11)$$

where c is the household's consumption, $a_s^{i'}$ and $a_r^{i'}$ are the savings in safe and risky assets for spouse i respectively, y_m^i is the labor income of spouse i , and a^i is the cash-on-hand for spouse i . The term Ω represents the fixed cost of stock market participation.

For divorced couples, the budget constraint of the head of the household in the second period is given by:

$$c^{hh'} = \begin{cases} y_m^{hh'} + \frac{a^{hh'} + a^{p'}}{2} - K^{hh} & \text{if } m = c \\ y_m^{hh'} + a^{hh'} & \text{if } m = s \end{cases} \quad (12)$$

where $c^{hh'}$ is the consumption of the head of the household, $y_m^{hh'}$ is the labor income of the head of the household, $a^{hh'}$ and $a^{p'}$ are the cash-on-hand of the household head and partner, respectively, and K^{hh} is the dissolution cost of marriage. In this two-period model, spouses do not save in the second period and consume all their disposable income. The consumption depends on the marital property regime. Households married under separate property ($m = s$) consume their labor income

and their cash-on-hand. However, those married under community property ($m = c$) consume their labor income and half the cash-on-hand of both spouses net of the dissolution cost of marriage.

We assume that community-property spouses must pay a dissolution cost (K) in the event of divorce. This cost accounts for the time, legal costs, and relocation costs spouses face to dissolve the community-property marriage and the shared pool of marital assets (e.g., inventory, valuing the assets, etc.). Following [Mazzocco \(2007\)](#) and [Mazzocco et al. \(2014\)](#), we assume that each spouse pays a fixed dissolution cost that destroys a proportion of their permanent income:

$$K^i = \kappa \bar{y}_c^i \quad \forall i \in \{hh, p\}. \quad (13)$$

5.5 Recursive Formulation of the Household Head's Problem

We now characterize the household head's problem. The state variables for a household are: the gender of the household head, the household head's cash-on-hand (a^{hh}), the partner's cash-on-hand (a^p), the partner's portfolio allocation between risky and safe assets (a_s^p, a_r^p), both realizations of the stochastic components of income ($\epsilon^{hh}, \epsilon^p$) and the marital property regime (m). We denote the vector of state variables as $\mathcal{S} = \{a^{hh}, a^p, a_s^p, a_r^p, \epsilon^{hh}, \epsilon^p, m\}$. The household head solves the following problem:

$$V^M(\mathcal{S}) = \max_{a_s^{hh}, a_r^{hh}, c} \left\{ \frac{\left(\frac{c}{\theta(d=0)}\right)^{1-\gamma}}{1-\gamma} + \beta \left[(1-\delta) \mathbb{E}V^M(\mathcal{S}') + \delta \mathbb{E}V^D(hh, \mathcal{S}') \right] \right\}. \quad (14)$$

subject to the budget constraints (11) and (12), the borrowing constraint (6), the short-sale constraint (7), the law of motion of assets (8), the stock market participation constraints (9) and (10), and the income process (3) and (4). The expectation is taken with respect to future realizations of transitory income, stock market returns, and the divorce probability.

The term $V^D(hh, \mathcal{S}')$ denotes the household head's problem in case of divorce. Since it is a two-period model, the household head consumes all the income and does not save. The consumption is determined by the marital property regime, as outlined in the budget constraint (12). In [Appendix D](#), we provide a detailed exposition of the household head's problem.

Table 7: Model Parameter Values

Parameter	Description	Value		Source
		Female Household Head	Male Household Head	
<i>First step</i>				
<i>Income process</i>				
\bar{y}_s^{hh}	Permanent income household head, sep.	€22368.52	€27095.82	EFF
\bar{y}_s^p	Permanent income spouse, sep.	€31543.89	€18879.94	EFF
\bar{y}_c^{hh}	Permanent income household head, com.	€15660.94	€26579.89	EFF
\bar{y}_c^p	Permanent income spouse, com.	€21484.88	€17133.12	EFF
σ_{hh}	Std. dev. income shock household head	0.444	0.417	EFF
σ_p	Std. dev. income shock spouse	0.459	0.427	EFF
ρ_{hh}	Persistence income shock household head	0.904	0.814	EFF
ρ_p	Persistence income shock spouse	0.834	0.713	EFF
<i>Spouse's savings</i>				
$\frac{a^p}{y^p}$	Savings-to-income ratio	22.85%	19.43%	EFF
	Participation risky	24.91%	26.16%	EFF
	Conditional risky share	46.03%	41.07%	EFF
<i>Other parameters</i>				
σ_r^2	Variance risky return	0.246 ²		Bank of Spain
μ_r	Avg risky asset return	3.50%		Bank of Spain
r_s	Avg safe asset return	1.00%		See text
χ	Min. income for participation	€13736.72		See text
δ	Prob. divorce	19.30%		INE
γ	Risk aversion	10		Cocco et al. (2005)
β	Discount factor	1		See text
$\theta(d)$	Equivalence scale	$1+0.51_{d=0}$		OECD
<i>Second step</i>				
κ	Dissolution costs of marital savings	25%	12.5%	-
Ω	Participation cost	€14.80	€13.00	-

6 Calibration

We calibrate the model using a two-step strategy. In the first step, we use data to estimate the parameters that can be identified outside the model. In the second step, we calibrate the remaining two parameters to match the empirical gap in risky assets share between separate and community-property couples as well as the participation in risky assets for separate property couples. Table 7 summarizes the main parameter values for two economies: one where women are the head of the household and another where men are the head of the household.

6.1 First Step

Income process. We use the panel structure of the EFF between 2002-2020 and restrict the sample to those couples we observe four consecutive waves (i.e., between 7 to 10 years). We focus on working married couples and set the permanent income component to match spouses' average annual labor earnings by gender. Table 7 shows that women earn less than their husbands, independently of who is the household head. In addition, total household income differences across marital property regimes are larger when wives are household heads.

Regarding the stochastic component of the income process, we estimate the following regression:

$$\ln w_{jt}^i = \beta_1 age_{jt}^i + \beta_2 (age^2)_{jt}^i + \beta_3 educ_{jt}^i + \lambda_j + \gamma_t + u_{jt}^i \quad \forall i \in \{h, w\} \quad (15)$$

where w_{jt}^i denotes the monthly wage of spouse i in household j . We control for household (λ_j) and time (γ_t) fixed effects. We then regress the residuals obtained from this estimation on their time lags to obtain the persistence parameters of the AR(1) process for the stochastic shocks and the variance of the innovations. Table 7 presents the estimates of these two objects. The estimates indicate that a household's head labor income is less volatile than their spouses'. When solving the model numerically, we discretize the labor income shock using the [Rouwenhorst \(1995\)](#) method.¹⁵

Assets returns. The average return of the risky asset takes the value $\mu_r = 3.5\%$, and its variance $\sigma_r^2 = 0.245^2$, consistent with average annual total returns and the maximum volatility of the IBEX-35 index between 2002-2021.¹⁶ We set the net return of the safe asset to $r_s = 1\%$ such that the equity premium is 2.5%.

Divorce probability. The divorce probability is set to 19.3% for both marital property regimes to match the average divorce rate over the total number of marriages using data from the Spanish Statistics National Institute data (INE for its acronym in Spanish). Appendix Figure A.2 shows that divorce dynamics are very similar for both property regimes, proxied by region of residence.

Risk aversion, discount factor, and participation costs. We borrow the risk aversion parameter from [Cocco et al. \(2005\)](#) and set it to $\gamma = 10$. Regarding the discount factor, we set $\beta = 1$ as our model has only two periods.¹⁷ Finally, we calibrate the income threshold above which spouses can invest in risky assets by setting χ equal to the annual earnings of household heads below the 10th percentile of the earnings distribution in our sample.

Household head's partner savings. The EFF survey data only provides information on financial outcomes at the household level. To overcome this data limitation, we use the average participation in risky assets, the conditional risky share, and the savings-to-income ratio of single men and women in the survey to calibrate the parameter values governing the household head's partner portfolio choices. In

¹⁵In particular, we discretized the income shock using ten grid points.

¹⁶Series Cotización y contratación. Acciones. Sociedad de Bolsas y Sociedad Rectora de la Bolsa de Madrid. Índice cotización. Índice IBEX 35 can be downloaded from www.bde.es.

¹⁷See [Gomes et al. \(2021\)](#) for a literature discussion of the estimates of the coefficient of risk aversion, discount factor, and participation costs in asset allocation models over the life cycle.

general, spouses participate similarly in household financial markets regardless of their gender. However, women save a lower fraction of their income and hold a safer portfolio, conditional on participating in risky assets, compared to men.

Equivalence scales. We use the OECD equivalence scale that assigns a value of 1 for the first household member and 0.5 for each additional member. Therefore, for married households, $\theta(d = 0) = 1 + 0.5$ while for divorced households $\theta(d = 1) = 1$.

6.2 Second Step

In the second step, we use the two remaining parameters, i.e., the dissolution cost of marital savings κ and the participation cost Ω , to target two moments that capture both the extensive and intensive margins of portfolio choice. Namely, the observed participation in risky assets by separate-property households and the estimated gap in the risky asset share between separate and community-property couples. We set κ to 25% or 12.50% and Ω to €14.80 or €13.00 to match the targeted moments for female-headed and male-headed couples, respectively.

Our calibration results for the fraction of income destroyed in the event of divorce are lower compared to previous studies. Using PSID data between 1986 and 1996, [Mazzocco et al. \(2014\)](#) estimate that divorce costs can represent up to 40% of disposable income for US couples. However, the comparison should be made with caution since their model includes household production, labor supply, and marital decisions.¹⁸

Regarding the fixed cost to participate in the stock market, our calibration results are also low compared with other estimates in the literature ([Catherine, 2022](#); [Fagereng et al., 2017](#)). However, one needs to take into account that the model also sets a minimum income requirement to invest in the stock market. If any, our calibrated values go in line with the estimates provided by [Fagereng et al. \(2017\)](#) who estimate a participation cost of \$69 but introduce a very high coefficient of risk aversion, $\gamma = 11$, close to ours.

7 Model Results

Table 8 shows the model fit by comparing our data targets from Section 4 and some untargeted moments with the model implications for female and male-headed

¹⁸[Mazzocco et al. \(2014\)](#) introduce the divorce cost as a free parameter in the budget constraint. In their model, the sum of couples' consumption, household production, and divorce costs equals labor earnings plus savings. To make their estimates comparable to ours, we use their measure of labor earnings computed as annual average working hours times median wages for married men and women, and net out average household production of couples with children from their measure of disposable income formed of labor earnings and wealth.

Table 8: Model Fit: Targeted and Untargeted Moments

	Female Household Head		Male Household Head	
	Data Estimate	Model	Data Estimate	Model
<i>Targeted moments</i>				
Participation, separate (%)	35.18	37.43	41.20	44.00
Risky assets share gap (p.p.)	3.07 (0.940)	3.22	-1.41 (1.875)	-1.24
<i>Untargeted moments</i>				
Participation gap (p.p.)	8.50 (2.155)	3.47	-4.80 (4.345)	-36.94
Savings to income ratio gap (p.p.)	-6.13 (2.019)	-6.22	-3.31 (1.198)	-3.46

Notes: Standard errors in parenthesis.

households, respectively. The model fits the two targeted moments remarkably well, given its parsimony, for both female and male-headed households. Specifically, the model closely replicates the stock market participation of separate property couples (37.43% and 44% for female and male-headed households, respectively, compared with an average of 35.18% and 41.2% in the data) and the gap in the conditional risky share between separate and community property couples (3.22 p.p. and -1.24 p.p. for female and male-headed households, respectively, compared with an average of 3.07 p.p. and -1.41 p.p. in the data).

To achieve this good model fit, the calibration implies that female-headed community property households incur greater costs from divorce relative to their income than male-headed households do. Essentially, a model with higher marital dissolution costs for wives, compared to husbands in equivalent decision-making roles, can account for our empirical findings. This implication aligns with empirical evidence showing that the economic cost of divorce differs by gender. Research suggests that women experience disproportionate losses in household income following divorce. For instance, [Leopold \(2018\)](#) attributes this to the higher likelihood of women assuming single parenting responsibilities, while [Wu and Schimmele \(2005\)](#) and [De Vaus et al. \(2017\)](#) highlight the reduced probability of women forming new partnerships after divorce.¹⁹ These results support the notion that gender disparities in dissolution costs, which cannot be easily controlled for in our regressions and are intrinsic to the legal system of marital property rules, could significantly contribute to the observed investment gaps detailed in Section 4.

¹⁹[Holden and Smock \(1991\)](#) and [Smock et al. \(1999\)](#) also provide evidence of gender-specific effects of marital disruption on individual well-being.

Table 8 also shows the model fit for the estimated participation and savings-to-income gap between marital property regimes. Importantly, these two gaps were left untargted in our calibration exercise. The model underpredicts the participation gap for both types of couples, especially when the men are the household heads. The income disparities between couples can partly explain these discrepancies in the magnitude of the participation gap. Notice that male-headed community-property couples generally have higher incomes than their female-headed counterparts, which increases their likelihood of reaching the income threshold for financial market participation regardless of the marital dissolution costs.

Moreover, the model generates a negative savings-to-income ratio gap between separate and community couples very close to the empirical estimates. Our results are in line with Voena (2015), who examined the effects of unilateral divorce law on savings and female labor supply in a dynamic model with endogenous divorce. In her model, the equal division of assets in divorce might not reflect the resource allocation during the marriage. Therefore, community property can lead the spouse who consumes more during the marriage to over-save to insure against the risk of divorce, translating into higher savings at the household level. Similarly, in our model, community property also generates higher savings accumulation than separate property. Equal division of assets induces higher precautionary savings if the dissolution costs are sufficiently large such that the cost of divorce could not be fully insured with the savings transfers from the partner. In a step forward from Voena (2015), in our setting, the division rule of marital assets may also induce higher investment in risky assets due to the coverage provided by the partner savings. We explore these channels in greater detail in the next section.

8 Explaining the Property Regime Gaps in Risky Financial Investment

Building a model allows us to quantify the potential mechanisms underlying the empirically estimated effects of marital property regimes on household financial portfolios. In the model, the coexistence of two alternative marital property regimes introduces several differences between couples. First, both regimes have different allocation rules of marital savings between spouses upon divorce. Separate-property spouses retain ownership of their individual portfolios in the event of divorce. In contrast, community-property spouses pool their savings together, and each of them retains 50% of the total household portfolio. Second, income levels vary by gender and marital property regime. This, in turn, implies differences in the total savings of the household head's partner, which we model as an exogenous fraction of their

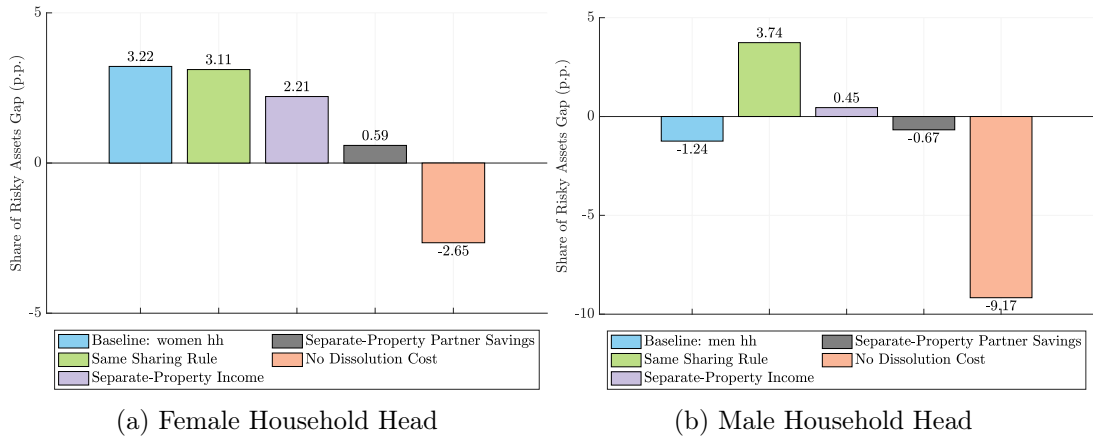


Figure 2: Model Results: Risky Assets Share Gap

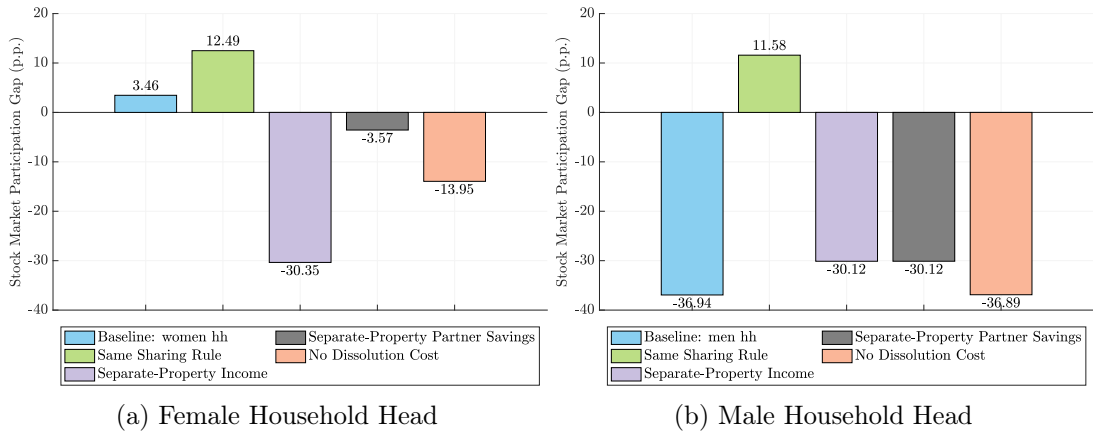


Figure 3: Model Results: Participation Gap

income. Finally, community-property spouses pay a dissolution cost of marriage while those in separate property face no cost.

We conduct four counterfactual exercises to isolate the contribution of these potential mechanisms to the risky financial investment gap between marital property regimes. Figure 2 shows the risky assets share gap between marital property regimes by gender of the household head in response to shutting down the different mechanisms. Similarly, Figure 3 shows the results for the risky assets participation gap. For convenience, the figures reproduce the baseline model results again (blue bars labeled “Baseline”). Next, we discuss each exercise in turn.

Sharing rule of marital assets in divorce. In the first exercise, we impose the same assets’ sharing rule upon divorce for both marital property regimes. Specifically, we simulate the model again under the assumption that both types of couples

maintain separate savings accounts and retain individual ownership of their investment portfolios in the event of divorce.²⁰ Precisely, we modify the budget constraint in 12 as follows:

$$c^{hh'} = \begin{cases} y_m^{hh'} + a^{hh'} - K^{hh} & \text{if } m = c \\ y_m^{hh'} + a^{hh'} & \text{if } m = s \end{cases} \quad (12a)$$

Imposing individual savings accounts that retain single ownership upon divorce marginally reduces the gap in the risky assets allocation when women make savings decisions but turns the gap positive when men take the leading role (green bars labeled “Same Sharing Rule”). Intuitively, the 50-50 sharing rule modifies the strength of the precautionary savings motive imposed by the dissolution cost on community-property spouses because it dictates the amount of savings transfer between spouses upon divorce. This channel seems to be particularly strong for male-headed households as separate accounts eliminate the coverage with the partner’s savings of potential financial losses due to investing in risky assets, driving down the risky assets allocation and even turning the property regime gap positive, i.e. implying that separate property couples invest more in risky assets than those married under community property. Figure E.1b in the Appendix clearly shows that, among all the exercises, individual accounts drive the lowest risky assets share of male household heads. By contrast, individual accounts exacerbate the burden of divorce for female household heads. Earning lower income than their partners, the lost savings transfers strengthens their precautionary savings motive. Figure E.1a in the Appendix shows that female household heads always have a lower risky assets share in their portfolio than their partners, so for them, what is crucial is the transfer of savings from their partners for consumption smoothing rather than for hedging risky investment. The effects of removing the sharing rule also emerges at the extensive margin of risky investment, as shown in Figure 3.

Income profiles. In the second exercise, we study the role of income differences between marital regimes in explaining the gaps in risky financial investment. To do so, we set the permanent income of community-property couples equal to that of separate property:

$$\bar{y}_c^i = \bar{y}_s^i \quad \forall i \in \{hh, p\} \quad (16)$$

Recall that changing the permanent income of spouses implicitly modifies the savings level of the household head’s partner, as their savings are modeled as an exogenous

²⁰Note that changing the marital property regime towards a scenario where both types of couples have community property would be misleading. We target the stock market participation cost to match the participation of separate property couples. Therefore, the cleaner approach to evaluate the role of the sharing rule on the financial investment gap between marital property regimes is to keep the separate property couples unchanged and only modify the community property couples. This reasoning also applies to the subsequent exercises.

fraction of their income. Consequently, to isolate the effects of higher income levels from those due to changing the available intra-household insurance, the exercise also fixes the savings of the partner at the baseline level.²¹

Income differences between marital property regimes help explain the gaps in risky financial investment for female-headed households, but these are not the primary driver (purple bar in Figure 2a labeled “Separate-Property Income”). Increasing the income level of community-property female household heads enables them to invest more in risky assets, bringing down slightly the gap between marital property regimes. Moreover, Figure 3a reveals drastic changes in the magnitude and sign of the participation gap in comparison with the baseline. These effects arise mechanically in the model due to a higher likelihood of crossing the minimum income threshold for stock market participation. Not surprisingly, income differences between marital property regimes marginally explain the gaps for male-headed households (also purple bar in Figure 2b) as, in this case, spouses barely differ in their individual income across property regimes (see again Table 7).

Household head’s partner level of savings. We consider a third exercise that recalibrates the household head’s partner savings rate under community property to match the savings level of their counterparts under separate property, while maintaining income profiles as in the baseline:

$$a_c^p = a_s^p. \tag{17}$$

The insurance provided by partners in community property is quantitatively significant to explaining the gaps in risky financial investment across marital property regimes when women lead household finances but not when men do (see gray bars in Figure 2 labeled “Separate-Property Partner Savings”). These results are partly a consequence of modeling the savings of the household head’s partner as an exogenous fraction of their income identical for both regimes. This implies that separate-property partners save more in levels than their counterparts in community property, as the former earn more. Also, income differences between spouses, and hence differences in the level of the partner’s savings, are the most pronounced for female-headed households (see again Table 7). Therefore, equalizing the partner’s savings to that of the level of separate property will show as quantitatively more important for female-headed households, as it implies a larger increase in savings than for male household heads.

²¹We recalibrate the savings rate of the partner under community property to match the level of their assets in the baseline economy. In particular, the rate decreases from 22.9% to 15.6% for male partners and from 19.4% to 17.6% for female partners.

In the model, the outside option for community property household heads is increasing in the partner’s level of savings. For female household heads, a better outside option improves consumption smoothing and weakens the precautionary savings motive in the form of safe assets. Similarly, for male household heads, a better outside option improves their hedging of financial risk and encourages risky investment. Finally, notice that the impacts on the household gaps are driven by the optimal individual behaviour of household heads. Even if the level of savings of partners increases, their portfolio shares are kept fixed to the value in the baseline (see Figure E.1 in the Appendix).

Dissolution costs of marital savings. Finally, in the fourth exercise, we assume that community property couples do not incur a dissolution cost upon divorce. Specifically, we modify the budget constraint in 12 as follows:

$$c^{hh'} = \begin{cases} y_m^{hh'} + \frac{a^{hh'} + a^{p'}}{2} & \text{if } m = c \\ y_m^{hh'} + a^{hh'} & \text{if } m = s. \end{cases} \quad (12b)$$

Quantitatively, the dissolution cost largely explains the risky assets share gaps between marital property regimes (illustrated by the orange bars labeled “No Dissolution Cost” in Figure 2). When community-property couples face no dissolution cost, the risky assets share gap for female-headed couples turns negative, and the one for male-headed marriages triples. Figure E.2 in the Appendix also shows that the savings-to-income gap turns positive for both female and male-headed couples. These results suggest that explicitly modeling the differences in dissolution costs implied by the two legal systems is key to generating the estimated gaps for female-headed couples and is consistent with our empirical strategy that aims to provide causal estimates of the effects of property rules on household portfolio choices. Not only that, introducing gender differences in the burden of divorce costs allows the model to replicate the differences in the sign of the estimated gaps by gender of the household head. Yet, the exercise results for female-headed households might seem counter-intuitive, as one would expect that women should also choose a riskier portfolio if married under community property due to better insurance in case of divorce. However, this argument overlooks a key point: divorce can be more costly for community property couples. When dissolution costs are sufficiently large, community-property female household heads find optimal to choose safer portfolios to hedge against the risk of divorce.

In summary, the model highlights the differences in the dissolution costs of marriage and the household head’s partner savings as the two mechanisms being the most quantitatively relevant to explaining our empirical findings. To evaluate the

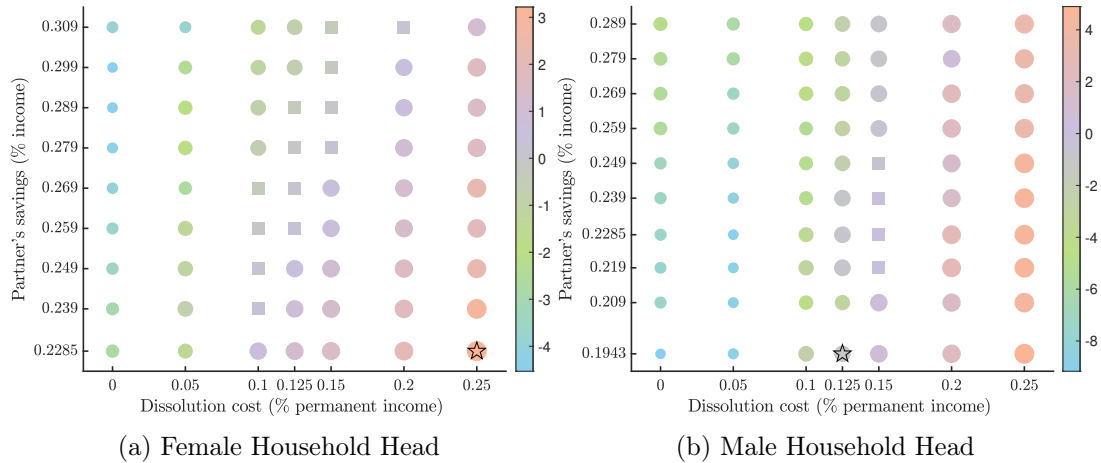


Figure 4: Gap in Risky Assets Share for Different Levels of Dissolution Cost and Partners' Savings

Notes: This figure illustrates the gap in the share of risky assets between different marital property regimes for different levels of dissolution costs and household head's spouse savings. The larger the marker, the larger the difference. In addition, squares represent combinations where the difference falls within the range of -0.5 to 0. A star indicates the parameter combination in the baseline model.

relative importance of both channels in the model, Figure 4 shows the gap in the share of risky assets between separate and community property couples for different combinations of dissolution costs and the partner's savings. Squares refer to those combinations where the gap is small, i.e. between -0.5 and 0.5, and the star indicates the baseline parameter combination. As can be inspected, the gap narrows when reducing the dissolution cost while fixing the partner's savings, and the other way around. However, notice that gaps in risky investment compatible with the empirical estimates only emerge for positive values of the dissolution cost. That is, differences in the partner's savings across marital property regimes alone cannot explain the marital property regime gap in risky investment in the model.²²

9 Conclusion

A vast literature in household finance emphasizes that women are less likely to take financial risks than men because of their psychological traits such as less confidence and more risk aversion, or because of the social norms they have been raised in. Until very recently, financial matters were considered the domain of men. This paper uncovers a critical yet unexplored determinant of female financial investment: the marital property regime.

²²Appendix Figure E.3 shows similar results for the extensive margin (i.e., the gap in stock market participation). Nonetheless, the participation gap turns negative in most of the simulations for female-headed households as this gap is smaller in the baseline model compared to the data.

We use rich household-level data and exploit the exogenous variation in the default marital property regime across Spanish regions to provide empirical evidence that property division rules are a significant factor in shaping household risky financial investment when women are in charge of the household finances. We find that female-headed households under separate property are 8.5% more likely to participate in risky assets than their counterparts married under community property. Not only do these women participate more in risky assets, but their risky assets share is 3 percentage points higher than their community-property peers. Both empirical findings are robust to controlling for a large set of socioeconomic characteristics, gaps between spouses, regional macroeconomic performance, risk attitudes, financial sophistication or cultural norms.

To better understand the mechanisms at play, we embed a portfolio choice framework into a tractable two-period model of married couples with an exogenous divorce probability, and different marital property regimes and gender of the household head. For simplicity, we assume that household heads choose consumption—which is public within the household—and their individual financial portfolios, taking as given the savings decisions of their partners. In this model, property division rules dictate the asset allocation upon divorce and the associated dissolution costs.

Explicitly modeling the differences in dissolution costs implied by the two marital property regimes and by the gender of the household head is essential for the model to align with the empirically estimated gaps in risky investment. When dissolution costs are sufficiently large, community-property household heads find it optimal to choose safer portfolios to hedge against the risk of divorce. This mechanism is particularly relevant for community-property female household heads, as divorce would leave them with relatively lower income levels and higher income risk. Conversely, differences in the partner’s savings between marital property regimes offer additional insurance to community property household heads, enabling them to hedge riskier portfolios. However, this hedging of financial risk is only significant for male household heads, who consistently have higher incomes and hold riskier portfolios than their partners. For female household heads, achieving consumption smoothing through their partner’s transfer of savings and safer individual investment portfolios is more crucial than hedging risky investments. Counterfactual simulations reveal that among these mechanisms, differences in dissolution costs are the primary driver of the gaps in risky financial investment between property regimes.

References

Alonso Hernández, M. d. R. (2019). The attribution upon the usage of the family residence.

- Bacher, A. (2021). Housing and savings behavior across family types.
- Bajtelsmit, V. L. and Bernasek, A. (1996). Why do women invest differently than men? *Financial counseling and planning*, 7.
- Barber, B. M. and Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *The quarterly journal of economics*, 116(1):261–292.
- Benzoni, L., Collin-Dufresne, P., and Goldstein, R. S. (2007). Portfolio choice over the life-cycle when the stock and labor markets are cointegrated. *The Journal of Finance*, 62(5):2123–2167.
- Bover, O. (2008). Oversampling of the wealthy in the spanish survey of household finances (eff). *Irving Fisher Committee Bulletin*, 28:399–402.
- Brassiolo, P. (2013). The effect of property division laws on divorce and labor supply: evidence from spain.
- Bucher-Koenen, T., Lusardi, A., Alessie, R., and Van Rooij, M. (2017). How financially literate are women? an overview and new insights. *Journal of Consumer Affairs*, 51(2):255–283.
- Carroll, C. D. (2000). Portfolios of the rich.
- Catherine, S. (2022). Countercyclical labor income risk and portfolio choices over the life cycle. *The Review of Financial Studies*, 35(9):4016–4054.
- Chiappori, P.-A., Fortin, B., and Lacroix, G. (2002). Marriage market divorce legislation and household labor supply. *Journal of political Economy*, 110(1):37–72.
- Cocco, J. F., Gomes, F. J., and Maenhout, P. J. (2005). Consumption and portfolio choice over the life cycle. *The Review of Financial Studies*, 18(2):491–533.
- Croson, R. and Gneezy, U. (2009). Gender differences in preferences. *Journal of Economic literature*, 47(2):448–74.
- Cubeddu, L. and Ríos-Rull, J.-V. (2003). Families as shocks. *Journal of the European Economic Association*, 1(2-3):671–682.
- De Nardi, M., French, E., Jones, J. B., and McGee, R. (2021). Why do couples and singles save during retirement? Working paper, National Bureau of Economic Research.
- De Vaus, D., Gray, M., Qu, L., and Stanton, D. (2017). The economic consequences of divorce in six oecd countries. *Australian Journal of Social Issues*, 52(2):180–199.

- Doepke, M. and Tertilt, M. (2016). Families in macroeconomics. In *Handbook of macroeconomics*, volume 2, pages 1789–1891. Elsevier.
- Dohmen, T., Falk, A., Huffman, D., Sunde, U., Schupp, J., and Wagner, G. G. (2011). Individual risk attitudes: Measurement, determinants, and behavioral consequences. *Journal of the european economic association*, 9(3):522–550.
- Fagereng, A., Gottlieb, C., and Guiso, L. (2017). Asset market participation and portfolio choice over the life-cycle. *The Journal of Finance*, 72(2):705–750.
- Frémeaux, N. and Leturcq, M. (2020). Inequalities and the individualization of wealth. *Journal of Public Economics*, 184:104145.
- Global Gender Gap Report, W. E. F. (2022). Global gender gap report 2022.
- Gomes, F., Haliassos, M., and Ramadorai, T. (2021). Household finance. *Journal of Economic Literature*, 59(3):919–1000.
- Guiso, L. and Zaccaria, L. (2021). From patriarchy to partnership: Gender equality and household finance. Working paper, Einaudi Institute for Economics and Finance (EIEF).
- Holden, K. C. and Smock, P. J. (1991). The economic costs of marital dissolution: Why do women bear a disproportionate cost? *Annual review of sociology*, 17(1):51–78.
- Hospido, L., Izquierdo Martínez, S., and Machelett, M. (2021). The gender gap in financial competences. *Banco de España Analytical Article*, Economic Bulletin 1/2021.
- Huang, Y., Pantano, J., Ye, H., and Yi, J. (2021). Property division upon divorce and household decisions. *Journal of Human Resources*, pages 0519–10243R3.
- Hubener, A., Maurer, R., and Mitchell, O. S. (2016). How family status and social security claiming options shape optimal life cycle portfolios. *The review of financial studies*, 29(4):937–978.
- Imre, B. (2023). Marital property regimes and investments. Working paper, German Institute for Economic Research (DIW Berlin).
- Ke, D. (2021). Who wears the pants? gender identity norms and intrahousehold financial decision-making. *The Journal of Finance*, 76(3):1389–1425.
- Klapper, L. and Lusardi, A. (2020). Financial literacy and financial resilience: Evidence from around the world. *Financial Management*, 49(3):589–614.

- Leopold, T. (2018). Gender differences in the consequences of divorce: A study of multiple outcomes. *Demography*, 55(3):769–797.
- Love, D. A. (2010). The effects of marital status and children on savings and portfolio choice. *The Review of Financial Studies*, 23(1):385–432.
- Lusardi, A. and Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of economic literature*, 52(1):5–44.
- Mazzocco, M. (2007). Household Intertemporal Behaviour: A Collective Characterization and a Test of Commitment. *The Review of Economic Studies*, 74(3):857–895.
- Mazzocco, M., Ruiz, C., and Yamaguchi, S. (2014). Labor Supply, Wealth Dynamics and Marriage Decisions. 2014 Meeting Papers 210, Society for Economic Dynamics.
- Piazzalunga, D. (2016). Till money us do part: Property division at divorce and married couples’ time use behaviour. Working paper, Working paper. 41, 45, 65.
- Pollak, R. A. (2022). Family bargaining with altruism. Working Paper 30499, National Bureau of Economic Research.
- Rouwenhorst, K. G. (1995). Asset pricing implications of equilibrium business cycle models. *Frontiers of business cycle research*, 1:294–330.
- Smock, P. J., Manning, W. D., and Gupta, S. (1999). The effect of marriage and divorce on women’s economic well-being. *American Sociological Review*, 64(6):794–812.
- Van Rooij, M., Lusardi, A., and Alessie, R. (2011). Financial literacy and stock market participation. *Journal of Financial economics*, 101(2):449–472.
- Vissing-Jørgensen, A. (2002). Limited asset market participation and the elasticity of intertemporal substitution. *Journal of political Economy*, 110(4):825–853.
- Voena, A. (2015). Yours, mine, and ours: Do divorce laws affect the intertemporal behavior of married couples? *American Economic Review*, 105(8):2295–2332.
- Wu, Z. and Schimmele, C. M. (2005). Repartnering after first union disruption. *Journal of marriage and family*, 67(1):27–36.
- Yamaguchi, S., Ruiz, C., Mazzocco, M., et al. (2014). Labor supply, wealth dynamics and marriage decisions. In *2014 Meeting Papers*, number 210. Society for Economic Dynamics.

Appendix

A Institutional background

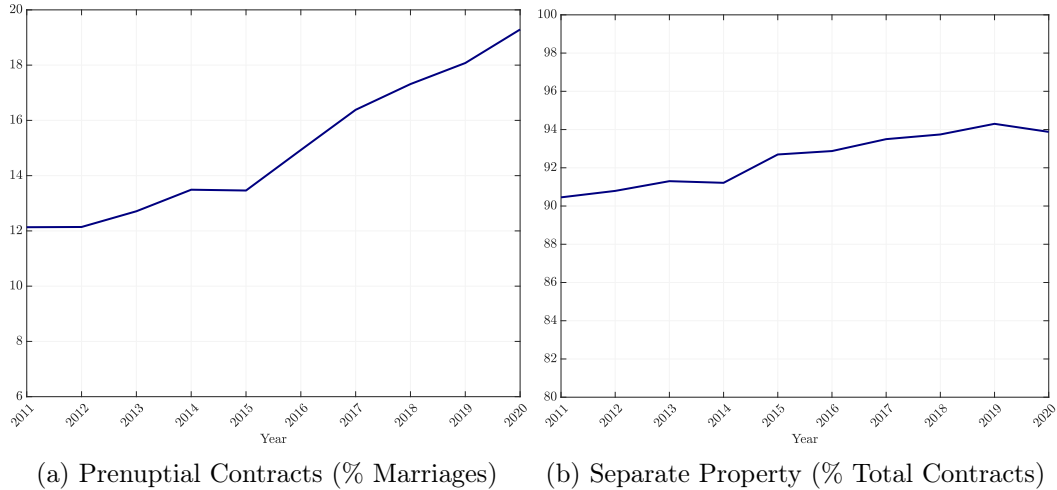


Figure A.1: Prenuptial Contracts

The figure plots the evolution of prenuptial contracts (% total marriages) and prenuptial contracts for separate property (% total prenuptial contracts) between 2011-2020. The data has been obtained from Statistics of the General Council of Notaries.

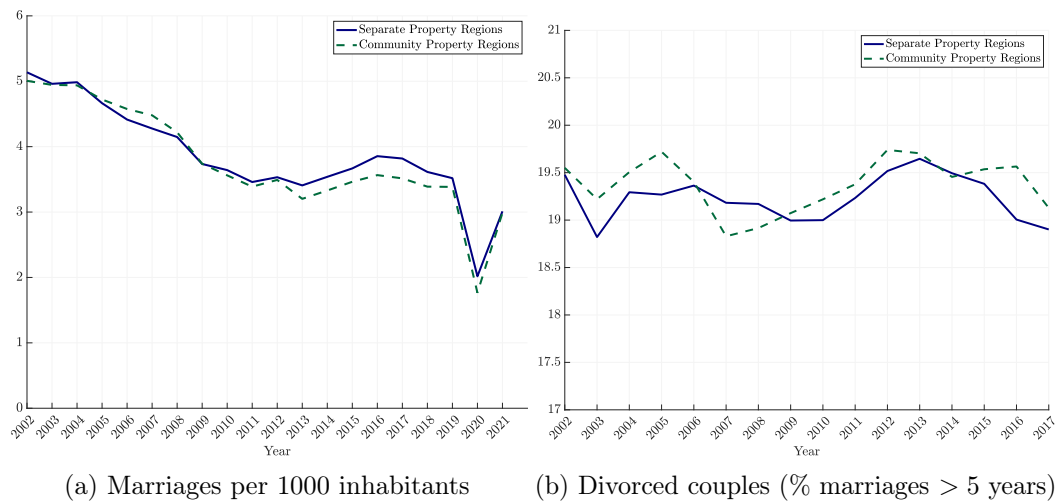


Figure A.2: Marriages and Divorces by Default Regime

Notes: The figure plots the evolution of marriages per 1000 inhabitants across Spanish regions depending on their default property regime for the period 2001-2020. Separate-property regions (blue line) are Catalonia and the Balearic Islands. Community-property regions (green dot line) are the rest of the Spanish regions (excluding Valencian Community).

B Household Data

Variable	Description
Risky assets	
Listed shares	Publicly traded shares.
Unlisted shares	Non-publicly traded shares.
Mutual funds	Investment funds or other collective investment schemes: guaranteed investment funds, equity funds, hybrid funds, and global funds. Guaranteed and global funds can include both equity and debt instruments.
Safe assets	
Fixed-income securities	Public fixed-income securities (government bonds, other general government securities, etc.) and private fixed-income securities (commercial paper, corporate bonds, etc.).
Saving and checking accounts	Accounts and deposits (non) usable for payments.
Savings-to-income ratio	
Savings	The difference between annual household labor earnings and consumption in durable and non-durable goods
Income	Annual household labor earnings

Table B.1: Data description

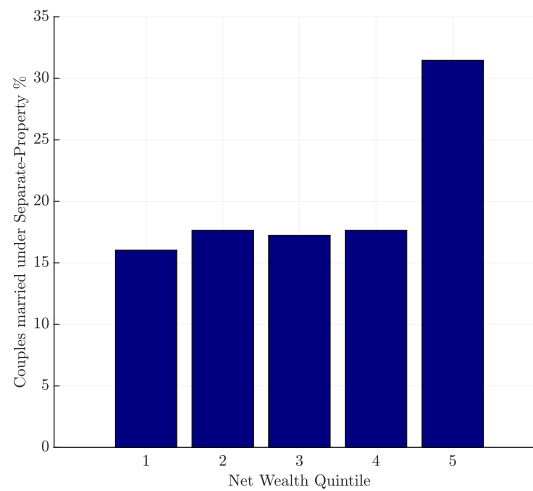


Figure B.1: Married Couples under Separate Property in Community-Property Regions

Notes: The figure shows the proportion of married couples that opt out of community property by net wealth percentile as a share of total married couples opting out. Data are from the 2002-2020 waves of the Spanish Survey of Household Finances. The sample is restricted to two-earner households. Self-employed households are excluded.

C Empirical Results

Table C.1: OLS Estimates - Participation in Risky Financial Assets

	(1) Participation Risky Assets	(2) Participation Risky Assets	(3) Participation Risky Assets
	All couples	Female Household Head	Male Household Head
Separate Property	0.044* (0.024)	0.107*** (0.023)	0.013 (0.026)
Households Characteristics	Yes	Yes	Yes
Survey Year FE	Yes	Yes	Yes
Observations	4025	1378	2647

Notes: This table provides OLS results from a model where the dependent variable is a binary variable that equals 1 if households hold wealth in risky assets (i.e., listed shares, unlisted shares, and mutual funds). The sample includes all two-earner married households in 2002-2020. Standard errors (in parenthesis) are robust and clustered at the regional level.

Table C.2: OLS Estimates - % Risky Financial Assets

	(1) Share Risky Assets	(2) Share Risky Assets	(3) Share Risky Assets
	All couples	Female Household Head	Male Household Head
Separate Property	4.017*** (1.322)	5.113*** (1.192)	3.312** (1.486)
Households Characteristics	Yes	Yes	Yes
Survey Year FE	Yes	Yes	Yes
Observations	4025	1378	2647

Notes: The sample includes all two-earner married households in 2002-2020. This table provides OLS results from a model where the dependent variable is the share of risky assets (i.e., listed shares, unlisted shares, and mutual funds) out of the total financial portfolio. Standard errors (in parenthesis) are robust and clustered at the regional level.

Table C.3: Robustness Checks - Participation in risky financial assets

	(1)	(2)	(3)
	Participation Risky Assets	Participation Risky Assets	Participation Risky Assets
Female Household Head			
Separate Property	0.073*** (0.026)	0.086*** (0.021)	0.083*** (0.021)
Mean Outcome	0.22	0.22	0.22
Risk Attitudes	✓		
Online Banking		✓	
Mother Housewife			✓
Households Characteristics	Yes	Yes	Yes
Survey Year FE	Yes	Yes	Yes
Observations	1378	1378	1378

Notes: This table reports 2SLS estimates from a model where the dependent variable is a binary variable that equals 1 if households hold wealth in risky assets. Separate property is instrumented. *Risk attitudes* is a categorical variable that measures attitudes towards risk from a lower to a higher degree of risk tolerance. *Online banking* is a dummy variable for online banking usage. *Mother Housewife* is a dummy variable that equals 1 if the mother of the household head is/was a housewife. The sample includes all two-earner married households in 2002-2020 whose household head is female. We exclude from the sample couples living in Valencian Community as this region changed its default regime during the time period considered. Standard errors (in parenthesis) are robust and clustered at the regional level.

Table C.4: Robustness Checks - % Risky financial assets

	(1)	(2)	(3)
	Share Risky Assets	Share Risky Assets	Share Risky Assets
Female Household Head			
Separate Property	2.530** (1.097)	3.128*** (0.919)	2.573** (1.029)
Mean Outcome	7.23	7.23	7.23
Risk Attitudes	✓		
Online Banking		✓	
Mother Housewife			✓
Households Characteristics	Yes	Yes	Yes
Survey Year FE	Yes	Yes	Yes
Observations	1378	1378	1378

Notes: This table reports 2SLS estimates from a model where the dependent variable is the portfolio share of different risky asset classes. Separate property is instrumented using a dummy for residence in Catalonia or the Balearic Islands. *Female* is a dummy variable that equals 1 if the headship of the household is female and 0 otherwise. *Risk attitudes* is a categorical variable that measures attitudes towards risk from a lower to a higher degree of risk tolerance. *Online banking* is a dummy variable for online banking usage. *Mother Housewife* is a dummy variable that equals 1 if the mother of the household head is/was a housewife. The sample includes all two-earner married households in 2002-2020 whose household head is female. We exclude from the sample couples living in Valencian Community as this region changed its default regime during the time period considered. Standard errors (in parenthesis) are robust and clustered at the regional level.

Table C.5: Robustness Checks - Propensity Score Matching

	(1) Participation Risky Assets	(2) Share Risky Assets
Female Household Head		
Treatment	0.125*** (0.041)	4.056** (2.050)
Observations	1248	1248

Notes: This table reports ATE estimates by propensity score matching. The dependent variable is a binary variable that equals 1 if households hold wealth in risky assets - mutual funds, listed shares, and unlisted shares (column (1)) and the share in risky asset (column (2)). Treatment is a dummy for residence in Catalonia or the Balearic Islands and being married in separate property. It takes value 0 if married in community property and living in any other region in Spain. The sample includes all two-earner married households in 2002-2020 for which wives are households heads. We have used as balancing observables: household income, number of individuals living in the household, household head's age, education, homeownership, occupation in the financial sector, and comparative proxies between spouses (education, age, and wage ratios)

Table C.6: Robustness Checks - Regional Controls

	(1) Participation Risky Assets	(2) Share Risky Assets
Female Household Head		
Separate Property	0.071*** (0.024)	2.551*** (0.980)
Mean Outcome	0.22	7.23
GDP	✓	✓
Unemp. rate	✓	✓
Households Characteristics	Yes	Yes
Survey Year FE	Yes	Yes
Observations	1378	1378

Notes: This table reports 2SLS estimates from a model where the dependent variable is a binary variable that equals 1 if households hold wealth in risky assets - mutual funds, listed shares, and unlisted shares (column (1)) and the share in risky asset (column (2)). Separate property is instrumented using a dummy for residence in Catalonia or the Balearic Islands. The sample includes all two-earner married households in 2002-2020 for which wives are households heads. We exclude from the sample couples living in Valencian Community as this region changed its default regime during the time period considered. GDP refers to real GDP measured in 2015 CPI prices. Standard errors (in parenthesis) are robust and clustered at the regional level.

Table C.7: Robustness Checks - Controlling for regional differences

	(1) Participation Risky Assets	(2) Share Risky Assets	(3) Participation Risky Assets	(4) Share Risky Assets
	Catalonia vs Madrid		Balearic Islands vs Community regions	
Separate Property	0.061*** (0.006)	2.612*** (0.346)	0.055*** (0.021)	2.683*** (0.872)
Households Characteristics	Yes	Yes	Yes	Yes
Survey Year FE	Yes	Yes	Yes	Yes
Observations	516	516	1140	1140

Notes: This table reports 2SLS estimates from a model where the dependent variable is a binary variable that equals 1 if households hold wealth in risky assets - mutual funds, listed shares, and unlisted shares (columns (1) and (3)) and the share in risky asset (columns (2) and (4)). Separate property is instrumented using a dummy for residence in Catalonia (columns (1) and (2)) and a dummy for residence in Balearic Islands (columns (3) and (4)). The sample includes all two-earner married households in 2002-2020 for which wives are households heads and either live in Catalonia or Madrid (columns (1) and (2)) or include all regions except Catalonia (columns (3) and (4)). Standard errors (in parenthesis) are robust and clustered at the regional level.

Table C.8: Robustness Checks - Using region of birth as IV

	(1) Participation Risky Assets	(2) Share Risky Assets
	Female Household Head	
Separate Property	0.122*** (0.030)	1.418 (1.873)
Mean Outcome	0.20	6.60
Households Characteristics	Yes	Yes
Survey Year FE	Yes	Yes
Observations	848	848

Notes: This table reports 2SLS estimates from a model where the dependent variable is a binary variable that equals 1 if households hold wealth in risky assets - mutual funds, listed shares, and unlisted shares (column (1)) and the share in risky asset (column (2)). Separate property is instrumented using a dummy for region of birth in Catalonia or the Balearic Islands. The sample includes all two-earner married households in waves 2002, 2007-2020 for which both spouses have been born in the same region. We exclude from the sample couples living in Valencian Community for comparability. Standard errors (in parenthesis) are robust and clustered at the regional level.

Table C.9: Robustness Checks - Excluding Households that received financial assets in the form of inheritances or gifts

	(1) Participation Risky Assets	(2) Share Risky Assets
Female Household Head		
Separate Property	0.100*** (0.025)	1.476 (1.194)
Mean Outcome	0.21	5.94
Households Characteristics	Yes	Yes
Survey Year FE	Yes	Yes
Observations	1063	1063

Notes: This table reports 2SLS estimates from a model where the dependent variable is a binary variable that equals 1 if households hold wealth in risky assets - mutual funds, listed shares, and unlisted shares (column (1)) and the share in risky asset (column (2)). Separate property is instrumented using a dummy for residence in Catalonia or the Balearic Islands. The sample includes all two-earner married households in 2008-2020 for which wives are household heads and have not received any financial wealth in form of inheritances or gifts. We exclude from the sample couples living in Valencian Community as this region changed its default regime during the time period considered. Standard errors (in parenthesis) are robust and clustered at the regional level.

Table C.10: Robustness Checks - Household head and Second Earner

	(1) Participation Risky Assets	(2) Share Risky Assets
Female Household Head		
Separate Property	0.079*** (0.027)	2.176** (1.008)
Mean Outcome	0.21	7.08
Households Characteristics	Yes	Yes
Survey Year FE	Yes	Yes
Observations	989	989

Notes: This table reports 2SLS estimates from a model where the dependent variable is a binary variable that equals 1 if households hold wealth in risky assets - mutual funds, listed shares, and unlisted shares (column (1)) and the share in risky asset (column (2)). Separate property is instrumented using a dummy for residence in Catalonia or the Balearic Islands. The sample includes all two-earner married households in 2002-2020 for which wives is the household head and the second earner. We exclude from the sample couples living in Valencian Community as this region changed its default regime during the time period considered. Standard errors (in parenthesis) are robust and clustered at the regional level.

Table C.11: Potential Mechanisms- Disentangling dissolution cost from liquidation costs

	(1) Participation Risky Assets	(2) Share Risky Assets
	Female Household Head	
Separate Property	0.075*** (0.023)	2.841*** (0.941)
Mean Outcome	0.23	7.81
Households Characteristics	Yes	Yes
Survey Year FE	Yes	Yes
Observations	1233	1233

Notes: This table reports 2SLS estimates from a model where the dependent variable is a binary variable that equals 1 if households hold wealth in risky assets - mutual funds, listed shares, and unlisted shares (column (1)) and the share in risky asset (column (2)). Separate property is instrumented using a dummy for residence in Catalonia or the Balearic Islands. The sample includes all two-earner married households in 2002-2020 for which wives are household heads and homeowners. We exclude from the sample couples living in Valencian Community as this region changed its default regime during the time period considered. Standard errors (in parenthesis) are robust and clustered at the regional level.

D Dynamic Problem

The corresponding dynamic problem of the household head is given by:

$$V^M \left(a^{hh}, a^p, a_s^{p'}, a_r^{p'}, \epsilon^{hh}, \epsilon^p, m \right) = \max_{a_s^{hh'}, a_r^{hh'}, c} \left\{ \frac{\left(\frac{c}{\theta(d=0)} \right)^{1-\gamma}}{1-\gamma} \right. \\ \left. + \beta \left[(1-\delta) \mathbb{E}V^M \left(a^{hh'}, a^{p'}, 0, 0, \epsilon^{hh'}, \epsilon^{p'}, m \right) + \delta \mathbb{E}V^D \left(hh, a^{hh'}, a^{p'}, \epsilon^{hh'}, m \right) \right] \right\}$$

subject to

$$c + \sum_i a_s^{i'} + \sum_i a_r^{i'} = \sum_i y_m^i + \sum_i a^i - \Omega \mathbb{I}_{a_r^{hh'} > 0 \& a_r^{p'} = 0}$$

$$a^{i'} = (1+r_r) a_r^{i'} + (1+r_s) a_s^{i'}, \quad \forall i \in \{hh, p\}$$

$$y_m^i = \bar{y}_m^i \epsilon^i, \quad \ln(\epsilon^i) = \rho \epsilon^i + v^i, \quad v^i \sim \mathcal{N}(0, \sigma_i^2), \quad \forall i \in \{hh, p\}$$

$$r_r \sim \mathcal{N}(\mu_r, \sigma_r^2)$$

$$\mu_r > r_s$$

$$\epsilon^i \perp r_r, \quad \forall i \in \{hh, p\}$$

$$a_s^{i'} \geq 0, \quad \forall i \in \{hh, p\}$$

$$a_r^{i'} \geq 0, \quad \forall i \in \{hh, p\}$$

$$a_s^{hh'} + a_r^{hh'} \leq \bar{A}_m$$

$$a_r^{hh'} = 0 \text{ if } \bar{y}_m^{hh} \leq \chi$$

where the value function of being divorced in the second period is:

$$V^D(hh, a^{hh'}, a^{p'}, \epsilon^{hh'}, m) = \max_{c^{hh'}} \frac{\left(\frac{c^{hh'}}{\theta(d=1)}\right)^{1-\gamma}}{1-\gamma}$$

subject to

$$c^{hh'} = \begin{cases} y_m^{hh'} + \frac{a^{hh'} + a^{p'}}{2} - K^{hh} & \text{if } m = c \\ y_m^{hh'} + a^{hh'} & \text{if } m = s \end{cases}$$

$$y_m^{hh'} = \bar{y}_m^{hh'} \epsilon^{hh'}, \quad \ln(\epsilon^{hh'}) = \rho \epsilon^{hh'} + v^i, \quad v^i \sim \mathcal{N}(0, \sigma_{hh}^2).$$

E Additional Model Results

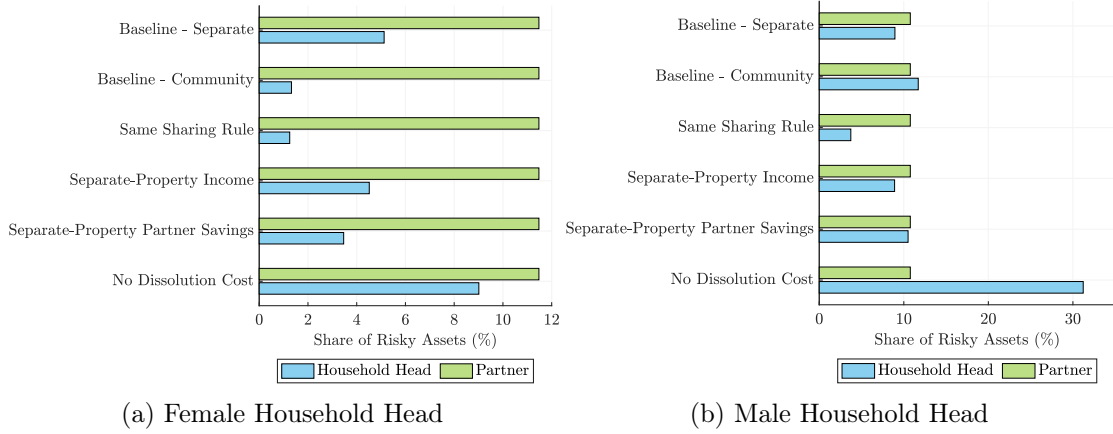


Figure E.1: Model Results: Spouses' Risky Assets Share

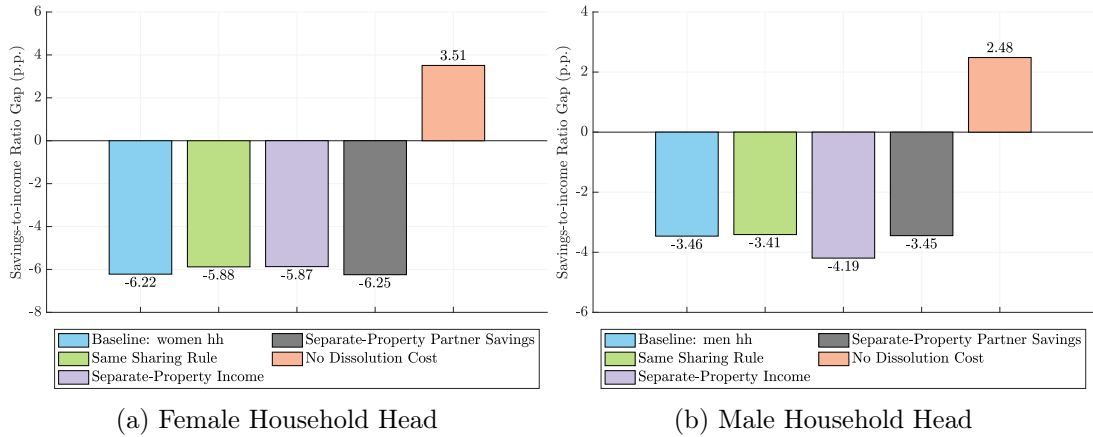


Figure E.2: Model Results: Savings-to-income ratio Gap

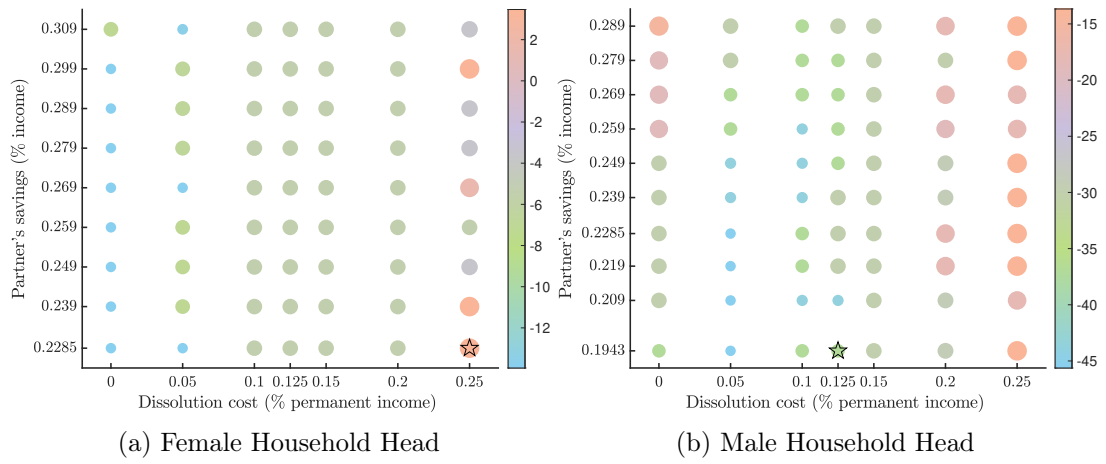


Figure E.3: Gap in participation for different levels of dissolution cost and spouses' savings

Notes: This figure illustrates the gap in the share of risky assets between different marital property regimes for different levels of dissolution costs and household head's spouse savings. The larger the marker, the larger the difference. In addition, squares represent combinations where the difference falls within the range of -0.5 to 0. A star indicates the parameter combination in the baseline model.