When Wives Command: Household Portfolio Choices and Marital Property Regime

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Abstract

This paper studies the link between married couples' portfolio choices and property division rules. Using household data from the Spanish Survey of Household Finances, we exploit the regional variation in default marital property regimes in Spain to estimate the causal effect of property division rules on household financial investment. We find that separate-property couples hold riskier financial portfolios than community-property ones when wives are responsible for household finances. To rationalize this gap in risky asset holdings, we develop a financial portfolio choice model where wives make savings decisions and couples differ in their property division rule. Divorce risk encourages higher precautionary savings in safe assets for community-property spouses compared to separate property due to higher dissolution costs of marital savings. This translates into separate-property spouses saving less and allocating a larger portfolio share to risky assets. Lower income levels and higher income risk for women reinforce this mechanism, contributing to explaining the property regime gap in risky financial investment between couples.

JEL: D14, G11, J12, J16, K36
Keywords: Personal Finance, Portfolio Choice, Marriage, Gender, Family Law

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1 Introduction

The marital property regime has been a key determinant of the economic nature of marriage. 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 type of marital property regime has relevant implications for savings decisions mainly because of two reasons. First, the marital property regime affects married couples' incentives to save because property division rules determine the allocation of spouses' savings *ex-post* marriage (Voena, 2015). While separate property limits the ability to tap into the spouse'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 different property division rules distort spouses' optimal savings decisions during the marriage, as spouses can differ in their contribution to household income or consumption levels. Second, property division rules also affect the economic cost of terminating the marriage (Imre, 2022). 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.

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. Couples adopt the default marital property regime in their region of residence unless spouses agree on a different one by signing a prenuptial agreement. 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 to provide causal estimates of the effects of property division rules on couples' financial portfolio choices. The Spanish Survey of Household Finances (or EFF for its acronym in Spanish) provides information on Spanish households' wealth, debt, and demographics.

[1] In 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. We denote this regime as community property or joint ownership throughout the paper.

Particularly relevant for our study, it contains detailed information on household financial investment by asset 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 9% more likely to participate in risky assets than their counterparts married under community property when wives 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 diversified portfolios towards risky assets than those married in community property. On average, couples married under separate property hold a share in risky asset classes 5 percentage points higher than couples married under community property when wives take a primary role in household finance 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. However, the regional variation in default property regimes in Spain 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 attitudes towards risk or cultural norms differently between the two groups of regions over the course of history. We ensure that our results are robust to controlling for idiosyncratic differences that can affect household financial behavior and could have been captured by our instrument. In addition to including a wide range of socioeconomic characteristics and gaps between spouses, we show that our empirical findings remain stable and strongly significant when controlling for differences in risk aversion, financial sophistication, or gender norms promoting female financial independence.

To rationalize the empirical findings, we develop a two-period model of financial portfolio choice where couples differ in their marital property regime. For simplification, households consist of two spouses who are born married and face an exogenous probability of divorce. The household head decides on the level of consumption, which is public within the household, and her savings in safe *and* risky financial assets given her spouse's savings decisions and expectations about both spouses' future labor

income, asset returns, and marital status.[2] 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 individual assets according to the title of ownership and face no dissolution cost. In contrast, community property couples must incur dissolution costs as total household savings need to be equally split between spouses. We introduce this dissolution cost assuming that an exogenous fraction of total household income is destroyed in the event of divorce (Cubeddu and Ríos-Rull, 2003; Bacher, 2021b). Divorce represents a source of financial risk in the model because it requires couples to split their assets and because it results in a state with lower income levels and higher income risk. However, the strength of the precautionary savings motive differs across marital property regimes.

We calibrate the model to match key moments of Spanish married couples' financial behavior for which wives are the most knowledgeable about household finances. In particular, we calibrate the model assuming that wives are the ones making portfolio choices given their husband's savings decisions. By means of counterfactual simulations, we show that divorce risk and gender heterogeneity in labor income profiles are the most important determinants through which marital property regime affects financial portfolio choices. The model mimics the estimated marital property gap in risky financial investment in female-headed households. The model matches well both the targeted gap in participation in risky assets between marital property regimes and the untargeted gaps in the risky assets share and the total savings-to-income ratio. Relative to separate property, community property's higher marriage dissolution costs induce spouses to increase precautionary savings and lower their demand for risky assets. Low labor income levels and higher income risk for wives further strengthen couples' precautionary savings motive under divorce risk.

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 (see, e.g., Global Gender Gap Report, 2022). Our research implies that a marital property regime that encourages an individual management of investment portfolios may be beneficial for wives. A diversification of the investment portfolio that encourages higher participation and share of risky assets allows insuring against the risk of divorce and the unpredictability of labor income dynamics with fewer savings.

[2]Our theoretical framework could be considered as a reduced-form version of the dynamic collective model of intra-household decision making (Mazzocco, 2005; Chiappori et al., 2002; Voena, 2015) where couples solve a constrained Pareto problem.

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 (2022) and Huang et al. (2021) examine empirically how divorce laws interact with different marital property regimes in shaping households economic behavior. Like us, Imre (2022) exploit the regional variation in default marital property regime law in Spain. She investigates the effects of the marital property regime on female labor supply, fertility, marriage, and marital dissolution rates. We contribute to this literature by studying how property division rules shape household financial decisions.

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 lens 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 the model are consistent with a collective model where wives' share of household resources in marriage is low. This implies that women benefit from the 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 the presence of uninsurable divorce and income risk. In this respect, we contribute to the literature studying how marital dynamics affect household portfolio allocation. Love (2010), Hubener et al. (2016) and Bacher (2021b) 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 the marital property regime on household financial investment decisions, given the gender differences found in the previous literature regarding psychological traits, risk-taking, or social norms.

The rest of the paper proceeds as follows. The next section covers the Spanish institutional background. Section 3 presents the data, while section 4 empirically examines the role of the marital property regime for household financial behavior. Next, sections 5-9 lay down the theoretical model that rationalizes the empirical results. Section 10 offers concluding remarks.

2 Institutional Background

Spanish regions have considerable legislative autonomy. Particularly relevant for this paper, marital property regimes are regulated at the regional level. The marital property regime defines the legal ownership structure of assets acquired during the marriage. It regulates the division rule over couples' property upon marriage dissolution (due to divorce or death). 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.[3] Under community property, assets acquired during the marriage are jointly owned, and they are split equally between the spouses upon marriage dissolution. By contrast, under separate property, each spouse retains full ownership of the assets they have acquired during the marriage in case of divorce or death.

The default marital property regime applies unless spouses 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 2021). Despite the simplicity of the procedure, most marriages merely adopt the default property regime in their region. Appendix Figure A.1 shows the evolution of total prenuptial agreements as a share of marriages and prenuptial agreements for separate property as a share of total contracts in Spain. The number of prenuptial agreements remains below 20% of marriages. Among those prenuptial agreements, more than 90% corresponds to a change from community

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

Figure 1: Default Marital Property Regimes in Spain

Notes: The figure plots the regional variation in default property regime across Spanish regions. Separate-property regions are Catalonia, and the Balearic Islands are in blue, while community-property regions are in green. Valencian Community changed to default separate property between 2008 and 2016.

property to a separate property regime.[4] Figure A.2 shows that both marital property regimes have similar marriage and divorce dynamics.

Community and separate property imply different costs of distributing marital assets between spouses ex-post marriage (i.e., divorce or death) (Imre, 2022). Unlike couples married under separate property, community-property spouses are required to dissolve the community property regime by law. 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.[5] Therefore, divorce is more costly and lengthier for couples married under community property compared to those married under separate property.

3 Data

We use household-level data from the Spanish Survey of Household Finances. The survey is conducted every two years by the Bank of Spain and spans from 2002 to 2020 (7 waves in total). The survey reports detailed information on households'

[4]We find similar trends for the evolution of prenuptial contracts to adopt separate property by region.

[5]This procedure needs to be done before a public notary. The average cost ranged between 1,000 and 1,500 euros in 2022.

income, wealth, portfolio composition, and a rich set of socio-economic characteristics based on personal interviews. We exploit particular features of the EFF, which are rarely included in surveys reporting information about household wealth. First, 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). Second, the definition of the household head makes it very likely that he or she is the main decision-maker of 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". Thus, the household head is the person who is the most knowledgeable about the household's finances, i.e. household income, expenditures, investments, assets, etc. It is not simply a household member, but who is in charge/knows the most about the household's finances. We restrict the estimation sample to married couples over 25 years old with both spouses employed so that both contribute to household income. 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 reports summary statistics of our sample. Panel A presents summary statistics of households' socioeconomic characteristics. About 75% 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. In addition, 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 (i.e the household head) is 46 years old, more educated, slightly older, and earns more than his/her spouse. Looking at the differences in socioeconomic characteristics between the two types of regimes, we can observe that, on average, the household head in separate-property couples is more educated and more likely to work in the financial sector. In addition, these couples are wealthier and earn a higher income compared to their counterparts married under community property. Panel B presents summary statistics of household financial outcomes. We classify shares and mutual funds as risky financial assets, while fixed-income securities, savings, and checking accounts are categorized as safe financial assets. Panel B shows that separate property couples' average participation rate in risky assets and the risky portfolio share is higher.[6]

[6]The high participation rates are driven by the fact that the EFF survey oversamples at the top of the wealth distribution

Table 1: Household Summary Statistics

	Mean	St. dev.	Separate	Community
Panel A. Socioeconomic characteristics				
Household head				
Separate property	0.26	0.44		
Female	0.34	0.47	0.32	0.35
Age	46	8.69	46	46
Education				
Less than high school	0.23	0.43	0.16	0.26
High School	0.34	0.47	0.31	0.35
College	0.43	0.49	0.53	0.39
Occupation in financial sector	0.05	0.22	0.08	0.04
Comparative ratios bw spouses				
Education ratio bw spouses	1.10	0.48	1.10	1.11
Age ratio bw spouses	1.03	0.10	1.04	1.03
Wage ratio bw spouses	1.58	1.82	1.74	1.53
Other controls				
Home-ownership				
Rent	0.09	0.29	0.10	0.09
Ownership	0.87	0.33	0.86	0.88
Other	0.04	0.18	0.05	0.03
Household size	3.52	0.99	3.47	3.53
Income (thousands eur)	66.95	92.96	90.35	58.79
Net wealth (thousands eur)	552.02	3418.54	1123.63	351.35
Panel B. Financial Variables				
Financial Variables				
Participation risky assets	0.30	0.48	0.38	0.27
Risky asset classes (%Total asset classes)	0.15	0.24	0.19	0.14
Risky assets share	0.15	0.29	0.21	0.13

Notes: This table shows summary statistics for two-spouse households characteristics and by marital property regime of the household head. The sample includes information from the 2002-2020 waves of the Spanish Survey of Household Finances and is restricted to two-spouse households aged above 25 years old who are employed. Self-employed households are excluded from the sample. Observations: 4910 (4800 for the education ratio, 4791 for the risky asset classes share, and 4774 for the risky assets share)

Appendix Tables B.1 and B.2 reproduce the summary statics by gender of the household head. The average differences in socioeconomic characteristics and financial outcomes hold irrespective of the gender of the household head except for the wage differential between spouses. Male household heads earn about twice as much as their spouses, while female household heads earn less. Notice that since the percentage of female household heads who are also second earners is 72%, compared to only 18% for men, it is virtually the same analyzing the differential behavior of second earners or women. Finally, it is worth noticing that the gap in risky investment is considerably larger for households led by females.

4 Empirical Results

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 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 this group of regions changed to separate property. Figure B.1 in the Appendix disaggregates the share of households opting out of community property by net wealth percentile and shows that couples in the highest percentile are more likely to choose separate property. 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:

$$Y_{i,t} = \beta_0 + \beta_1 \text{Sep. Property}_{i,t} + \beta_2 \text{Female}_{i,t} + \beta_3 (\text{Sep. Property} \times \text{Female})_{i,t} + \delta' X_{i,t} + \lambda_t + \upsilon_{i,t} \quad (1)$$

$$\text{Sep. Property}_{i,t} = \alpha_0 + \alpha_1 \text{Region}_{i,t} + \gamma' X_{i,t} + \lambda_t + \varepsilon_{i,t} \quad (2)$$

where Sep. $\text{Property}_{i,t}$ equals 1 if household i is married under separate property and 0 if married under community property, while $\text{Region}_{i,t}$ 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 residence is correlated with their marital property regime choice but uncorrelated with household financial portfolio choices. To investigate whether there are heterogeneous effects depending on the gender of the household head, we add an indicator variable, $\text{Female}_{i,t}$, that equals 1 if the household head is the wife and its interaction with the property division rule variable. We additionally control for a full range of household socio-economic characteristics, X_{it}, including household income and net wealth deciles, number of individuals living in the household, household head's age, education, homeownership, civil union status, 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.

Table 2: First-stage Regressions

	(1) Sep. Property	(2) Sep. Property × Female
Regions with Default Sep. Property	0.542*** (0.016)	
Regions with Default Sep. Property × Female		0.541*** (0.029)
Household Characteristics	Yes	Yes
Survey FE	Yes	Yes
F-value	103.223	46.941
Prob > F	0.000	0.000
Observations	4262	4262
R^2	0.341	0.413

Notes: The sample includes all two-earner married households in 2002-2020 except for households living in Valencian Community since this region changed the default marital property regime law between 2008-2016. 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. Standard errors are robust.

Table 2 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, confirm the relevance of our instrument. Table 3 presents the 2SLS estimation results. Consistent with the literature on gender differences in finance, the negative coefficients for the female dummy indicate that couples are less likely to take financial risks when wives take a more prominent role in managing household finances compared to husbands. However, property division rules introduce significant differences in the participation and portfolio diversification of risky assets among female-headed couples. In particular, households married under a separate property regime are 9% more likely to invest in risky assets than their community property counterparts when wives are the most knowledgeable about household finances. These couples also hold a share in risky asset classes up to 5 percentage points higher compared to couples married under community property.

4.1 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

Table 3: Instrumental Variables Estimates

	(1) Risky Financial Assets	(2) % # Risky Financial Asset Classes
	IV-2SLS	IV-2SLS
Separate Property	-0.059	-0.037
	(0.041)	(0.026)
Female	-0.075***	-0.039***
	(0.015)	(0.010)
Female × Sep. Property	0.090***	0.051***
	(0.022)	(0.015)
Households Characteristics	Yes	Yes
Survey Year FE	Yes	Yes
Observations	4262	4156

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 a binary variable that equals 1 if households hold wealth in risky assets (i.e., listed shares, unlisted shares, and mutual funds) (Column (1)) or the share of different risky asset classes (Column (2)). 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 household headship is female and 0 otherwise. 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.

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 differently, and this could translate into different household financial behavior. We exploit the information provided in the EFF survey to control for some of these potential confounders.

Different legal traditions could have influenced preference towards risk and financial sophistication levels. They can also promote or discourage female financial independence, which can be transmitted through family ties from generation to generation. Imre (2022) provides evidence on this channel by showing that separation of property promotes a higher female labor supply in Spain. We use a variable measuring financial risk-taking as a proxy for household risk aversion, online banking and ownership of managed financial accounts as proxies for financial sophistication, and labor supply of household heads' mothers as a proxy for gender norms promoting female financial independence. Table C.1 and C.2 present 2SLS estimates when controlling for risk attitudes, financial sophistication levels, and egalitarian gender norms and show that our results are robust to these alternative channels.

5 Theoretical Framework

We develop a two-period unitary household financial portfolio choice model to shed light on the mechanisms behind our empirical findings. Households consist of two

individuals, $i = \{h, w\}$, who live for two periods and are born married. In the first period, both spouses are subject to idiosyncratic labor income shocks. The household head decides household consumption, which is a public good, and her allocation of savings between a risk-free and a risky asset. For simplicity, the spouse's savings and portfolio choices are exogenous. In the second period, couples face an exogenous probability of divorce and idiosyncratic labor income shocks. The marital property regime only matters for the allocation of assets between spouses in case of divorce and the dissolution costs of marital assets. Under community property, the sum of the spouses' total assets is divided equally between them. Moreover, spouses have to pay a dissolution cost of marital assets. In contrast, separate property spouses keep the property of their individual assets and pay no dissolution cost as there is no common pool of assets to be divided.

5.1 Preferences

Households have a time-separable CRRA preference over consumption, c. The period flow utility is given by

$$u(c) = \frac{c^{(1-\gamma)}}{1-\gamma} \tag{3}$$

where γ denotes the coefficient of relative risk aversion.

5.2 Asset Returns

The safe asset earns a constant gross return r_s, and the risky asset a random gross return r_r. We assume the return of the risky asset follows a normal distribution $r_r \sim N(\mu_r, \sigma_r^2)$, is independent and identically distributed and such that $\mu_r > r_s$.

5.3 Income Profiles

Income y^i for spouse i can be split into a deterministic and a stochastic component:

$$y^i = \bar{y}^i \epsilon^i \tag{4}$$

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

$$\ln(\epsilon^i) = \rho \epsilon^i + \upsilon; \quad \upsilon \sim \mathcal{N}\left(0, {\sigma_i}^2\right). \tag{5}$$

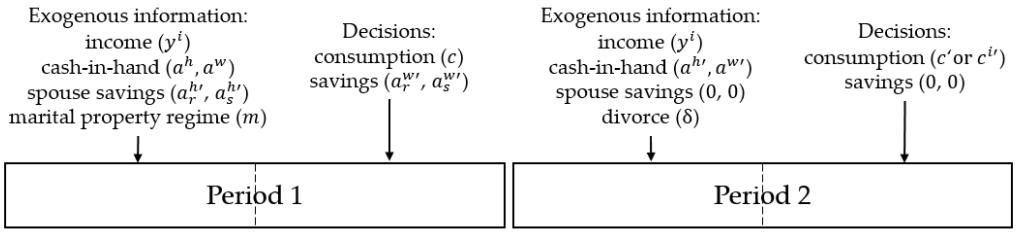


Figure 2: Timing of Events in the Model

5.4 Divorce and Marital Property Regime

In the second period, couples face an exogenous divorce probability, δ. The probability of divorce is common across marital property regimes.

If couples divorce, the allocation of marital assets between spouses and the corresponding dissolution costs depend on the marital property regime, m. When couples are married under community property, $m = c$, they split total assets equally and have to pay a dissolution cost of marital assets, κ^i. This cost accounts for time and all legal fees spouses must pay to the public notary to dissolve the shared pool of marital assets (i.e., inventory, valuing the assets, etc.). In contrast, couples married under separate property, $m = s$, take their individual assets upon divorce and pay no dissolution costs.

5.5 Timing

Figure 2 shows a timeline with the sequence of events in the model. In the first period, the household head learns both spouses' current income realization, her spouse's savings decisions, and marital property regime. Afterward, she decides on consumption, which is public within the household, and her allocation of savings between safe and risky assets. In the second period, the household head learns the spouse's income realizations, the spouse's cash-on-hand, and whether the couple divorces. Then, she decides optimally to consume all available resources.

5.6 Recursive Formulation

Notice that as the risky asset follows an i.i.d process, we can combine safe and risky assets into one "asset cash-in-hand" state variable: $a = (1 + r_r)a_r + (1 + r_s)a_s$

The state variables for a couple are the household head's asset cash-on-hand (a^i), her spouse's asset cash-on-hand (a^j), her spouse's choices of risky and safe assets ($a_s^{j'}, a_r^{j'}$), both stochastic components of income realizations (ϵ^i, ϵ^j) and their marital property regime (m).

The corresponding value function of married couples is as follows:

$$
\begin{aligned}
&V^M\left(a^w, a^h, a_s^{h'}, a_r^{h'}, \epsilon^w, \epsilon^h, m\right) = \max_{a_s^{w'}, a_r^{w'}, c} \frac{c^{(1-\gamma)}}{1-\gamma} \\
&+\beta\left[(1-\delta)\,\mathbb{E}V^M\left(a^{w'}, a^{h'}, 0, 0, \epsilon^{w'}, \epsilon^{h'}, m\right) + \delta \sum_{i=w,h} \mathbb{E}V^D\left(i, a^{w'}, a^{h'}, 0, 0, \epsilon^{i'}, m\right)\right] \\
&c + \sum_{i=w,h} a_s^{i'} + \sum_{i=w,h} a_r^{i'} = \sum_{i=w,h} y_t^i + \sum_{i=w,h} a^i \\
&a^{i'} = (1+r_r)\,a_r^{i'} + (1+r_s)\,a_s^{i'}, \quad \forall i = \{w,h\} \\
&y^i = \bar{y}^i \epsilon^i, \quad \forall i = \{w,h\} \\
&\ln(\epsilon^i) = \rho\epsilon^i + \upsilon; \quad \upsilon \sim \mathcal{N}\left(0, {\sigma_i}^2\right), \quad \forall i = \{w,h\} \\
&r_r \sim N(\mu_r, \sigma_r^2) \\
&\mu_r > r_s \\
&\epsilon^i \perp r_r, \quad \forall i = \{w,h\}
\end{aligned}
\tag{6}
$$

Similarly, the value function of a divorced individual i in the second period is:

$$
\begin{aligned}
&V^D\left(i, a^{w'}, a^{h'}, 0, 0, \epsilon^{i'}, m\right) = \max_{c^{i'}} \frac{\left(c^{i'}\right)^{(1-\gamma)}}{1-\gamma} \\
&c^{i'} = \begin{cases} y^{i'} + \frac{a^{w'}+a^{h'}}{2} - \kappa^i & \text{if } m = c \\ y^{i'} + a^{i'} & \text{if } m = s \end{cases} \\
&y^{i'} = \bar{y}^i \epsilon^{i'} \quad \ln(\epsilon^{i'}) = \rho\epsilon^{i'} + \upsilon; \quad \upsilon \sim \mathcal{N}\left(0, {\sigma_i}^2\right).
\end{aligned}
\tag{7}
$$

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 parameters to match the empirical participation gap in risky assets between separate and community-property couples. In the baseline calibration, women are assumed to be the household head. Table 4 summarizes the main parameter values.

Starting with the first-step parameters, we set the permanent component of income $\bar{y}^i$ to match the average gender wage gap between spouses observed in the EFF data between 2002 and 2020. We focus on working married couples for which wives are the most knowledgeable about household finances (i.e., female-headed households), which gives us a gender wage gap of $\frac{\bar{y}^h}{\bar{y}^w} = 1.25$. Regarding the stochastic component

Table 4: Parameters Calibrated

Parameter	Value	Source
First step		
$\bar{y}^h$	23958.72	EFF
$\bar{y}^w$	19166.88	EFF
σ_h^2	0.541	EFF
σ_w^2	0.609	EFF
ρ_h	0.571	EFF
ρ_w	0.531	EFF
σ_r^2	0.206	Bank of Spain
μ_r	0.0203	Bank of Spain
r_s	0	See text
δ	0.24	INE
γ	10	Cocco et al. (2005)
β	1	See text
α_1	24.12%	EFF
α_2	7.60%	EFF
Second step		
κ	10%	-

of the income process, we estimate the following regression using the panel structure of the EFF:

$$\ln w_{jt}^i = \beta_1 age_{jt}^i + \beta_2 (age^2)_{jt}^i + \beta_3 occupation_{jt}^i + \lambda_j + u_{jt}^i \quad \forall i \in \{h, w\} \qquad (8)$$

where w_{jt}^i denotes the monthly wage of spouse i in household j and λ_j refers to household 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 4 presents the estimates of these two objects. The estimates indicate that married women's labor income is more volatile than their husbands'. Females' labor income variance is higher, and the persistence of their stochastic income process is somewhat lower. When solving the model numerically, we discretize the labor income shock using the Tauchen (1986) method.[7]

The average return of the risky asset takes the value $\mu_r = 2.03\%$, and its variance $\sigma_r^2 = 0.206^2$, consistent with average annual total returns and volatility of the IBEX-35 index between 2002-2021.[8] For simplicity, we set the net return of the safe asset to 0, $r_s = 0$.

The divorce probability is set to 24%, a linear interpolation between the average divorce rate for marriages over 5 years old (18%) and the maximum divorce rate

[7] In particular, we discretized the income shock using ten grid points.

[8] Series 'Cotización y contratación. Acciones. Sociedad de Bolsas y Sociedad Rectora de la Bolsa de Madrid. Índice cotización. Indice IBEX 35' downloaded from www.bde.es.

of 30% for marriages over 20 years old. The interpolation brings the probability of divorce closer to that observed for couples married for more than 15 years, which reflects that in our sample the average age of first marriage is 31 while the average age is 47 years old. We used the Divorce Indicators data starting in 2005 from the Spanish Statistics National Institute (INE for its acronym in Spanish).

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 theoretical model has only two periods.[9]

The last first-step calibrated parameters are husband savings. The data from the EFF survey only provides information on household-level wealth holdings rather than individual savings. Since savings patterns and portfolio choices differ between married and single individuals (Bacher, 2021a; Love, 2010; Bertocchi et al., 2011), it would be misleading to use the data for single individuals to calibrate married men's savings profiles. To overcome this challenge, we assume that the contribution of each spouse to household savings is proportional to their labor income. This implies that the distribution of savings between spouses is proportional to their wage gap.[10] Formally, let's denote α_1 husband's total savings. We compute this share as follows:

$$\frac{a^h}{y^w + y^h} = \alpha_1 \times \frac{a}{y^w + y^h} \quad \text{where } \alpha_1 \equiv \frac{1}{1 + \frac{y_w}{y_h}}$$

where $\frac{a}{y} \equiv \frac{a}{y^w + y^h}$ is retrieved from the panel structure of EFF data 2002-2020 for households with finances led by wives. Specifically, we use the average change in total household financial savings between two consecutive waves to measure a while income refers to annual labor earnings. We obtain $\alpha_1 = 24.12\%$. Appendix Table D.1 compares these shares with the total household savings to income ratio. Additionally, we use the portfolio share in risky assets of divorced men in the sample to calibrate that of husbands'. This implies a risky portfolio share for husbands of $\alpha_2 = 7.60\%$.

In the second step, we use the one remaining parameter, i.e., the dissolution cost of marriage κ^i, to target the gap in risky asset participation between households married under separate and community property regimes. Recall that the dissolution cost of marriage is only paid by community property couples. We introduce the

[9] See 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.

[10] Grabka et al. (2015) and Meriküll et al. (2021) show using German and Austrian individual-level data that labor earnings are one of the main factors explaining spouses' share in total household savings.

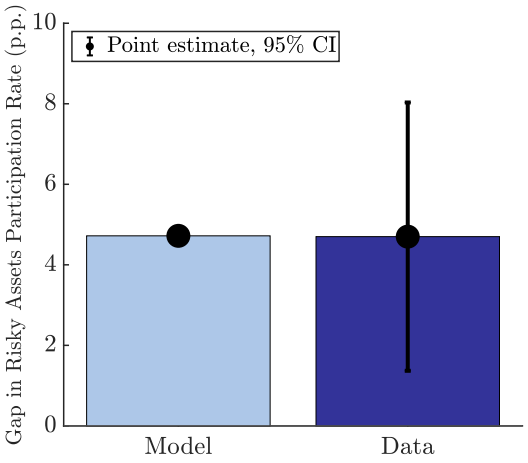


Figure 3: Property Regime Gap in Participation in Risky Assets: Model vs. Data

Notes: This figure plots the property regime gap in the participation in risky assets generated by the model and the one estimated in the data. The gap is computed as the difference between separate-property and community-property households' portfolio share in risky assets. The darker blue bar refers to the 2SLS estimate of the gap and the corresponding 95% CI using EFF survey waves 2002-2020. The lighter blue bar refers to the model simulation outcome.

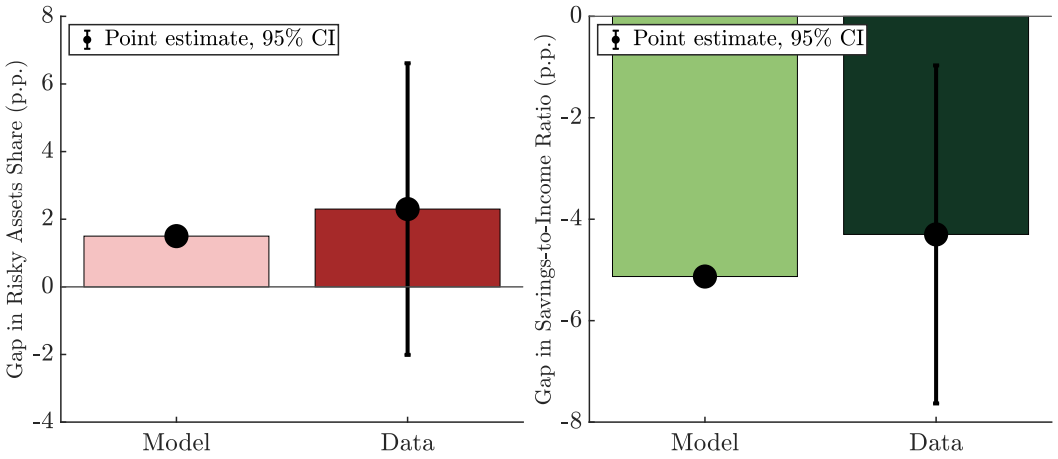
individual cost in the model as follows:

$$\kappa^i = \kappa y^{i'}$$

where y^i refers to the labor income of spouse i and κ, represents the fraction of total income destroyed in the event of marital dissolution. We set $\kappa = 10\%$, which falls below the range of values explored in previous studies such as Cubeddu and Ríos-Rull (2003) for the US economy.

7 Model Results

We begin quantitatively assessing the match of the model to the data. Figure 3 compares the gap in participation in risky assets between marital property regimes generated by the model and estimated in the data for couples whose household finances are led by wives. The model matches the targeted moment very well: it predicts a participation gap in risky assets between separate-property and community-property couples of 4.7 percentage points (pp) which equals exactly the estimated gap in the data. The empirical counterpart is estimated regressing female-headed households' participation in risky assets on a separate property regime dummy. To be consistent with our empirical strategy described in Section 4, we instrument the property regime variable with households' region of residence in Catalonia and Balearic Islands and control for the full range of socio-economic characteristics. Column (2) in Appendix Table C.3 shows the results of this estimation.



(a) Risky Assets Share (b) Total savings-to-income Ratio

Figure 4: Property Regime Gap in Risky Assets Shares and Total Savings: Model vs Data

Notes: This figure plots the property regime gap in the portfolio share in risky financial assets and the total savings-to-income ratio generated by the model, and the one estimated in the data. The gap is computed as the difference between separate-property and community-property households' outcomes. The darker bar refers to the 2SLS estimate of the gap and the corresponding 95% CI using EFF survey waves 2002-2020. The lighter bar refers to the model simulation outcome.

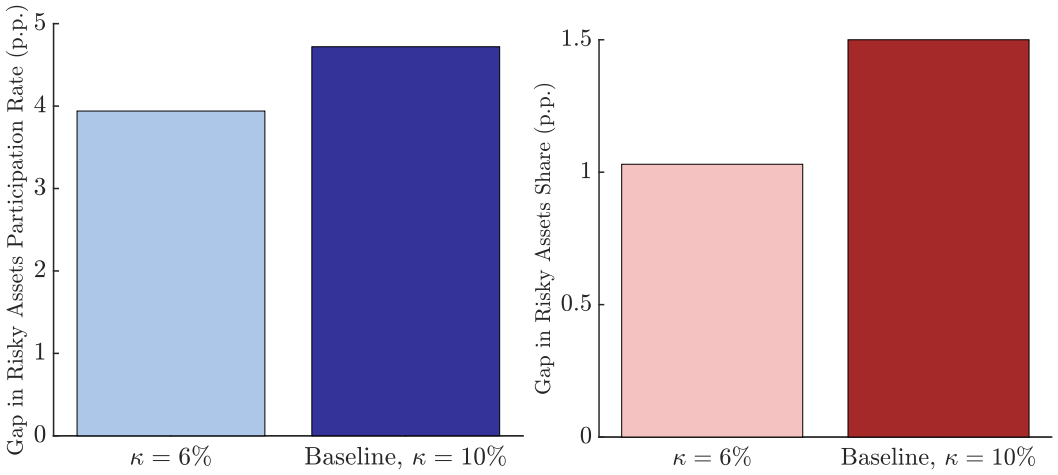
Figure 4 presents the model fit for the gap in risky assets share and total savings-to-income ratio between the different marital property regimes. Notice that these gaps are untargeted in the calibration exercise. Again, the empirical counterparts are based on regressions for female-headed household outcomes on an indicator variable representing the marital property regime. Columns (2) and (3) in Appendix Table C.3 show the 2SLS estimates of these two savings outcome gaps, respectively. The simulated model outcomes slightly underpredict the positive gap in the share of risky assets (Figure 4a) and slightly overpredicts the negative gap in financial savings (Figure 4b). Nonetheless, the model results fall within the 95% confidence interval.

8 Explaining the Property Regime Gap in Risky Investment

8.1 Transmission Channels

We now study the channels through which the marital property regime affects households' investment choices by means of counterfactual simulations. To do so, we change the parameter values of interest, solve the model again, and contrast the resulting simulation outcome to the baseline economy.

Divorce is a key driver of the marital property regime gaps in the model as property division rules dictate the sharing rule of assets between spouses upon divorce



(a) Risky Assets Participation Rate (b) Risky Asset Share

Figure 5: Counterfactual Scenario: Alternative Dissolution Costs of Marriage

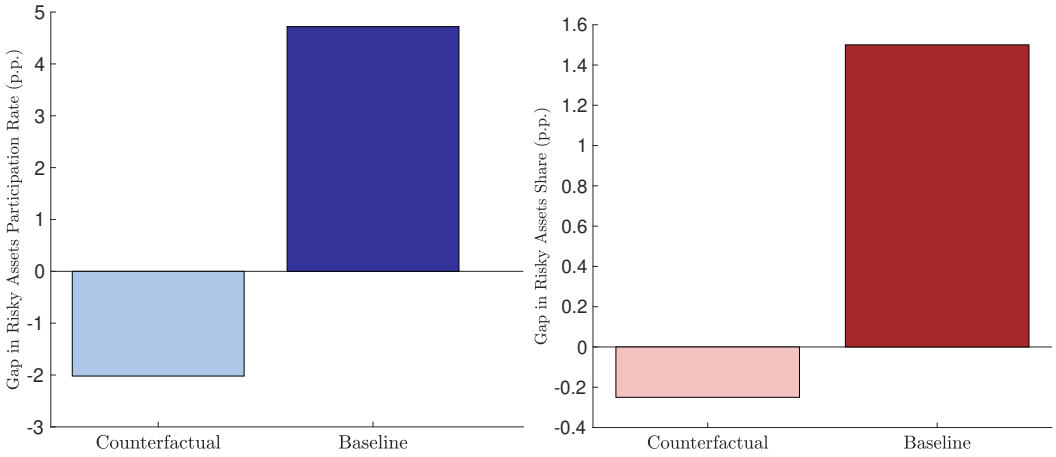
Notes: This figure plots the property regime gap in the participation and portfolio share in risky financial assets in the counterfactual scenario and the baseline economy. The gap is computed as the difference between separate-property and community-property households' outcomes.

as well as the dissolution costs of marriage. Without divorce risk, couples face the same optimization problem during marriage, and their optimal portfolio choice decisions should be the same. Table D.4 in the Appendix shows that risky asset share, participation rate, and total savings gap collapse to 0 when shutting down the divorce risk (i.e., $\delta = 0$).

The dissolution costs of marriage are a source of heterogeneity across marital property regimes. In the model, we assume that community-property couples must pay the cost of dissolving the common pool of assets while separate-property couples do not. The strength of the precautionary savings motive increases with the dissolution costs of marriage (i.e., the proportion of permanent income destroyed in the event of divorce). Figure 5 shows the model simulation outcome for the gap in the risky assets participation rate and the risky share for a lower value of κ. As can be inspected, both gaps increase with the dissolution costs of marriage as wives married in community property demand more safe assets to self-insure against divorce risk.

To explore how income level differences between spouses affect the property regime gaps in risky financial investments, we simulate a counterfactual scenario where we invert the gender income gap in permanent income (i.e. $\frac{\bar{y}^h}{\bar{y}^w} = 0.80$).[11] Figure 6 shows that the gap in risky investment both at the extensive and intensive margin decreases as the wife's permanent income increases relative to their husband's. In fact, it becomes slightly negative. Notice that in this alternative economy, all

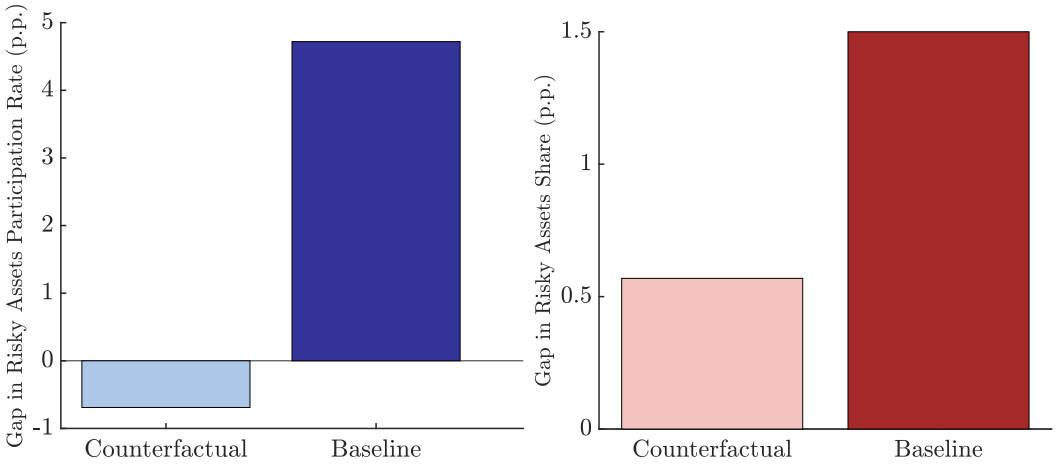
[11]For coherence, we also change the calibration for the husband's savings as we assume that spouses' distribution of household savings during the marriage is proportional to the wage gap.



(a) Risky Assets Participation Rate (b) Risky Asset Share

Figure 6: Counterfactual Scenario: Alternative Income Levels

Notes: This figure plots the property regime gap in the participation and portfolio share in risky financial assets in the counterfactual scenario and the baseline economy. The gap is computed as the difference between separate-property and community-property households' outcomes.



(a) Risky Assets Participation Rate (b) Risky Asset Share

Figure 7: Counterfactual Scenario: Alternative Income Risk

Notes: This figure plots the property regime gap in the participation and portfolio share in risky financial assets in the counterfactual scenario and the baseline economy. The gap is computed as the difference between separate-property and community-property households' outcomes.

married women would experience a smaller drop in consumption in case of divorce compared to the baseline economy as they earn higher permanent income on average. Thus, divorce becomes less risky for those married under community property, which reduces their demand for safe assets.

Finally, we investigate how income risk shapes the marital property regime gap in risky financial investments. We do so by assigning wives the stochastic part of their husbands' labor income process (variance and persistence), lowering their exposure to income fluctuations. Figure 7 shows that the gap in risky investment gets significantly reduced both at the extensive and intensive margin. Even becoming slightly negative for the participation rate! Compared to the baseline, divorce becomes a less financially risky outcome for community property wives who increase their demand for risky assets. This reduces the average differences in risky asset holdings between both types of couples.

Figures D.1-D.3 in the Appendix present the results for the gap in total savings-to-income ratio for each of the counterfactual scenarios. As can be inspected, the total savings-to-income ratio gap increases with the dissolution costs of marriage and income risk and decreases with larger income differentials in permanent income in favor of men.

8.2 Disentangling the role of the dissolution cost and the asset division rules

In the model, marital property regimes introduce differences in (i) the allocation rule of marital savings between spouses and (ii) the dissolution costs of marriage. More precisely, separate-property spouses retain ownership of their individual portfolio in the event of divorce, while community-property spouses pool their savings together and each of them retains 50% of the total household portfolio. In addition, we assume that community-property couples pay a dissolution cost of marriage while separate-property couples face no cost.

We conduct two counterfactual exercises to isolate the contribution of each of these two factors (i.e. asset allocation vs dissolution costs) on the estimated marital property regime gap. In the first scenario, we simulate the model assuming that both types of couples face the same dissolution cost of marriage (i.e.$\kappa = 10\%$). In the second scenario, we assume those married under separate property pool the assets upon divorce and divide them in half without paying any dissolution cost. Table 5 presents the difference in the risky investment participation rate, the share of risky assets, and the savings-to-income ratio in these two counterfactual economies with respect to the baseline for separate-property couples.

Column (1) in Table 5 shows that when separate-property wives bear the same dissolution cost as community-property wives, they save more but demand less risky assets. Higher dissolution costs make divorce riskier, as a fraction of permanent income is destroyed in the event of divorce, which encourages higher precautionary

Table 5: Disentangling the role of dissolution costs vs asset allocation rule

	(1) The role of dissolution cost	(2) The role of pooling assets
Risky assets participation rates	-7.26 p.p	-8.5 p.p
Risky assets share	-3.28 p.p	3.05 p.p
Total savings-to-income ratio	0.43 p.p	4.55 p.p

Notes: Columns (1) and (2) present the percentage points difference between the model outcomes in each of the two counterfactual scenarios and the baseline for separate-property couples. In the first column, we assume that separate property couples also pay the dissolution cost, κ. In the second column, we assume that separate property couples also pool the assets and divide them by half in case of divorce.

savings in the form of safe assets both at the extensive and intensive margin to smooth consumption. Column (2) in Table 5 shows that when separate-property couples pool the assets and divide them fifty-fifty in the event of divorce, they would also save more and demand less risky assets at the extensive margin. However, they would increase their risky investment at the intensive margin (i.e. they would allocate a higher share of their portfolio to risky assets). Quantitatively, the dissolution costs of marriage seem to be more important for explaining the property regime gap in risky investment at the extensive and fully explains it at the intensive margin. Instead, the fact that assets are split equally between spouses regardless of the intra-household distribution of savings during marriage seems to be quantitatively more relevant for explaining the difference between couples in savings accumulation.

9 Model validation

The empirical findings presented in Section 4 suggest that separate-property couples hold significantly riskier portfolios than community-property ones *only* when wives take a more prominent role in managing household finances. We validate our theoretical results by solving the model when the husband is the one making portfolio choices taking as given her wife's saving decisions.

Table 6 presents the relevant parameters modified for this exercise and their corresponding values. Relative to the baseline economy, we change both spouses' income parameters to match the income profiles of male-headed households in the EFF data 2002-2020. In particular, we change the permanent income components to match the average gender wage gap for male-headed households and estimate the variance and persistence of the stochastic component of both spouses' income for these couples. Finally, we also obtain the wife's total savings and share in risky

Table 6: Parameters when the Husband is the Household Head

Parameter	Value	Source
$\bar{y}^h$	28305.80	EFF
$\bar{y}^w$	14819.79	EFF
σ_h^2	0.349	EFF
σ_w^2	0.297	EFF
ρ_h	0.514	EFF
ρ_w	0.574	EFF
α_1	19.15%	EFF
α_2	6.42%	EFF

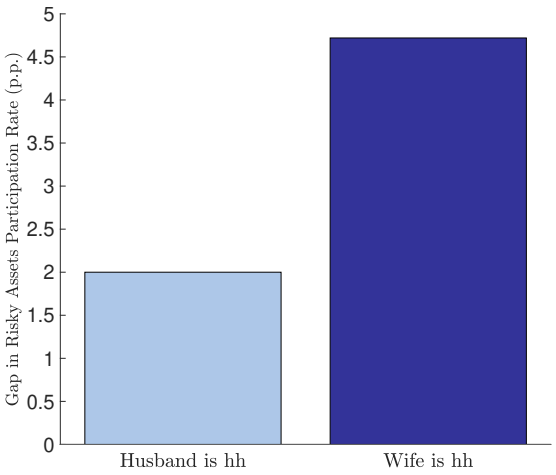


Figure 8: Model Validation

Notes: This figure plots the property regime gap in the risky assets participation rate when calibrating the model to match male-headed households' income profiles and compares it with the baseline economy (female-headed households). The gap is computed as the difference between separate-property and community-property households' outcomes

assets following the procedure explained in Section 6.[12] It is noteworthy that relative to the baseline economy, husbands leading household finances have a higher level of permanent income but a lower variance of the income shock compared to wives leading household finances. Conversely, the spouse in this case - the wife - maintains lower savings levels and a relatively smaller portfolio of risky assets.

Figure 8 compares the gap in risky asset participation rates in this alternative economy with the baseline one. As can be inspected, the gap in risky asset participation rates shrinks by more than 2 pp when we match key moments of male-headed couples' income profiles. These results highlight the importance of income profile heterogeneity

[12]Appendix Table D.3 presents the parameter estimates of the income process of male-headed households, whereas Table D.2 displays the values utilized for the wife's total savings and share in risky assets.

in explaining differences in portfolio investments for couples with the same property division rules.

10 Conclusion

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

We use rich household-level data and exploit the regional variation in default marital property regimes in Spain to provide causal evidence on the effects of property division rules on couples' risky financial investment. We find that couples married under separate property are more likely to hold wealth in risky assets than their counterparts married under community property when women are in charge of household finances. Not only do these couples participate more in risky assets, but also they hold a more diversified portfolio towards risky assets. In particular, separate-property households are up to 9% more likely to take financial risks than those married under community property. On average, they also hold a share in risky asset classes up to 5 percentage points higher.

To understand better the mechanisms at play, we develop a two-period financial portfolio choice model where wives decide how to allocate savings and couples differ in their property division rule. Couples consist of two individuals born married and face an exogenous probability of divorce in the second period. In the model, property division rules determine the sharing rule of marital savings upon divorce and the associated dissolution costs of marital assets. In the event of divorce, separate-property spouses take their individual assets and face no dissolution of marital assets while community-property couples must pay the costs of dissolving the common pool of assets equally between spouses. We calibrate the model to match key moments of Spanish female-headed couples and show that divorce risk and gender differences in labor income profiles are key determinants in shaping the financial portfolio choices of married couples under different property division rules.

In all, our results suggest that property division rules in marriage seem to be an essential factor influencing the portfolio choices of couples in the face of divorce risk. An exciting extension of this work would be to analyze the wealth accumulation outcomes of divorced women under these two regimes and their implications for explaining the gender wealth gap later in life. We leave this for future research.

References

Bacher, A. (2021a). The gender investment gap over the life-cycle.

Bacher, A. (2021b). 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.

Bertocchi, G., Brunetti, M., and Torricelli, C. (2011). Marriage and other risky assets: A portfolio approach. *Journal of Banking & Finance*, 35(11):2902–2915.

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.

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? Technical report, National Bureau of Economic Research.

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.

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.

Grabka, M. M., Marcus, J., and Sierminska, E. (2015). Wealth distribution within couples. *Review of Economics of the Household*, 13:459–486.

Guiso, L. and Zaccaria, L. (2021). From patriarchy to partnership: Gender equality and household finance. Technical report, Einaudi Institute for Economics and Finance (EIEF).

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. (2022). Essays in health and labour economics.

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.

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. (2005). Individual rather than household euler equations: Identification and estimation of individual preferences using household data. *Available at SSRN 695285*.

Meriküll, J., Kukk, M., and Rõõm, T. (2021). What explains the gender gap in wealth? evidence from administrative data. *Review of Economics of the Household*, 19:501–547.

Piazzalunga, D. (2016). Till money us do part: Property division at divorce and married couples' time use behaviour. Technical report, Working paper. 41, 45, 65.

Tauchen, G. (1986). Finite state markov-chain approximations to univariate and vector autoregressions. *Economics letters*, 20(2):177–181.

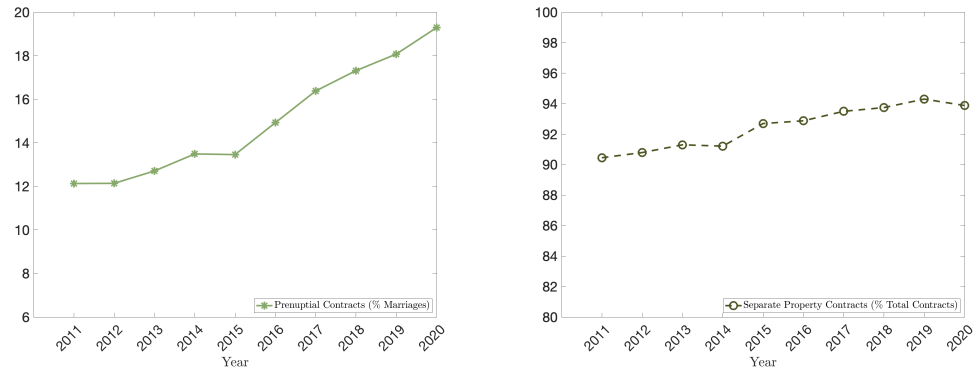
Van Rooij, M., Lusardi, A., and Alessie, R. (2011). Financial literacy and stock market participation. *Journal of Financial economics*, 101(2):449–472.

Voena, A. (2015). Yours, mine, and ours: Do divorce laws affect the intertemporal behavior of married couples? *American Economic Review*, 105(8):2295–2332.

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

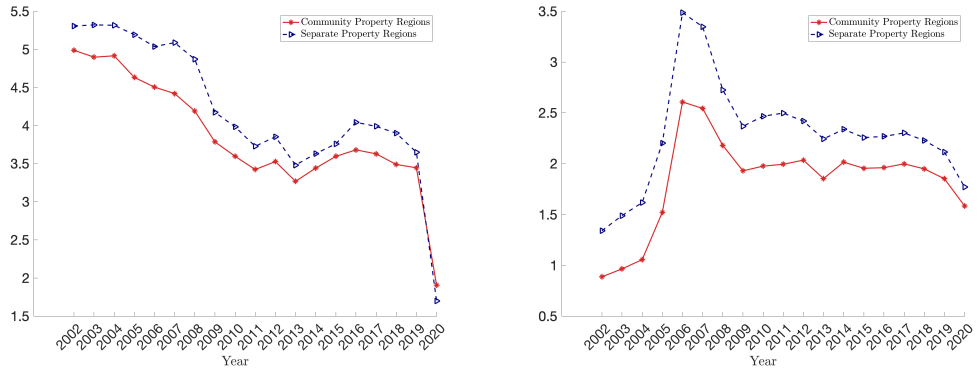
A Institutional background



(a) Prenuptial Contracts (% Marriages) (b) Separate Property (% Total Contracts)

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



(a) Marriages per 1000 inhabitants (b) Divorces per 1000 inhabitants

Figure A.2: Marriages and Divorces in Spanish Regions by Default Regime

Notes: The figure plots the evolution of marriages and divorces per 1000 inhabitants across Spanish regions depending on their default property regime for the period 2002-2020. Separate-property regions (blue triangle line) are Catalonia and the Balearic Islands (and Valencian Community for the period 2009-2015). Community-property regions (red star line) are the rest of the Spanish regions (and Valencian Community for the period 2002-2008, 2016-2017).

B Household Data

Table B.1: Household Summary Statistics - Wife is household head

	Mean	St. dev.	Separate	Community
Panel A. Socioeconomic characteristics				
Household head				
Separate property	0.25	0.43		
Age	44	7.98	44	44
Education				
Less than high school	0.24	0.43	0.19	0.26
High School	0.35	0.48	0.31	0.36
College	0.40	0.49	0.50	0.37
Occupation in financial sector	0.05	0.23	0.08	0.05
Comparative ratios bw spouses				
Education ratio bw spouses	1.24	0.56	1.20	1.26
Age ratio bw spouses	0.98	0.09	0.98	0.97
Wage ratio bw spouses	0.83	0.65	0.89	0.81
Other controls				
Home-ownership				
Rent	0.11	0.29	0.13	0.11
Ownership	0.84	0.33	0.82	0.85
Other	0.04	0.18	0.05	0.04
Household size	3.55	0.99	3.52	3.56
Income (thousands eur)	55.12	46.98	67.52	51.08
Net wealth (thousands eur)	306.46	614.22	464.76	254.90
Panel B. Financial Variables				
Financial Variables				
Participation risky assets	0.22	0.41	0.33	0.18
Risky asset classes (%Total asset classes)	0.11	0.21	0.17	0.09
Risky assets share	0.10	0.24	0.16	0.08

Notes: This table shows summary statistics for two-spouse households characteristics and by marital property regime of the household head. The sample includes information from 2002-2020 waves of the Spanish Survey of Household Finances and is restricted to two-spouse households aged above 25 years old who are employed. Self-employed households are excluded from the sample. Observations: 1681 (1652 for the education ratio, 1633 for the risky asset classes share, and 1626 for the risky assets share)

Table B.2: Household Summary Statistics - Husband is the household head

	Mean	St. dev.	Separate	Community
Panel A. Socioeconomic characteristics				
Household head				
Separate property	0.27	0.44		
Age	47	8.88	47	47
Education				
Less than high school	0.23	0.42	0.15	0.26
High School	0.33	0.47	0.31	0.34
College	0.34	0.50	0.54	0.40
Occupation in financial sector	0.05	0.22	0.09	0.04
Comparative ratios bw spouses				
Education ratio bw spouses	1.04	0.41	1.05	1.03
Age ratio bw spouses	1.06	0.09	1.06	1.06
Wage ratio bw spouses	1.98	2.09	2.14	1.92
Other controls				
Home-ownership				
Rent	0.08	0.27	0.08	0.08
Ownership	0.89	0.32	0.87	0.89
Other	0.03	0.17	0.04	0.03
Household size	3.50	1.00	3.45	3.51
Income (thousands eur)	73.17	109.00	101.28	62.92
Net wealth (thousands eur)	679.90	4186.65	1438.94	403.04
Panel B. Financial Variables				
Financial Variables				
Participation risky assets	0.35	0.48	0.41	0.32
Risky asset classes (%Total asset classes)	0.18	0.25	0.21	0.16
Risky assets share	0.18	0.31	0.23	0.16

Notes: This table shows summary statistics for two-spouse households characteristics and by marital property regime of the household head. The sample includes information from the 2002-2020 waves of the Spanish Survey of Household Finances and is restricted to two-spouse households aged above 25 years old who are employed. Self-employed households are excluded from the sample. Observations: 3229 (3148 for the education ratio, 3158 for the risky asset classes share and, 3148 for the risky assets share)

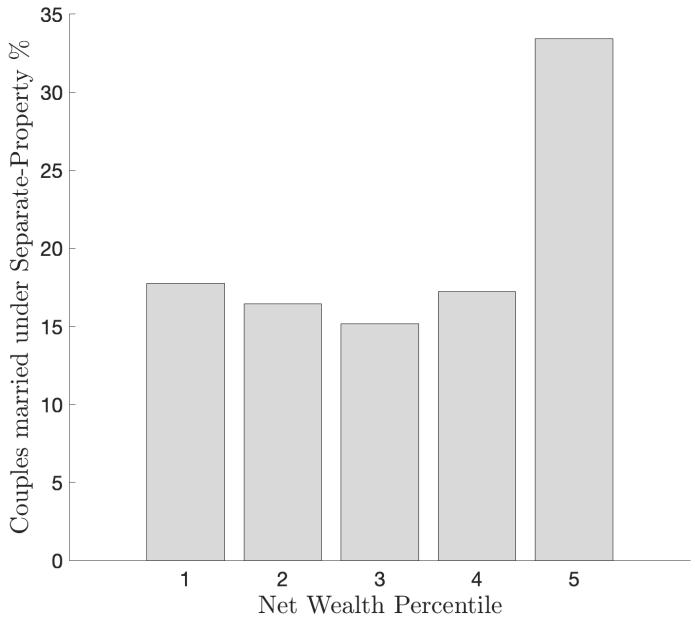


Figure B.1: Married Couples under Separate Property in Community-Property Regions

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 aged above 25. Self-employed households are excluded.

C Empirical Results

Table C.1: Robustness Checks - Participation in risky financial assets

	(1) Risky Financial Assets	(2) Risky Financial Assets	(3) Risky Financial Assets
Separate Property	-0.060	-0.086*	-0.061
	(0.036)	(0.044)	(0.040)
Female	-0.056***	-0.096***	-0.074***
	(0.016)	(0.015)	(0.015)
Female × Sep. Property	0.084***	0.151***	0.095***
	(0.022)	(0.022)	(0.023)
Risk Attitudes	✓		
Online Banking		✓	
Managed Fin. Accounts		✓	
Mother Housewife			✓
Households Characteristics	Yes	Yes	Yes
Survey Year FE	Yes	Yes	Yes
Observations	4262	3087	4216

Notes: The sample includes all two-earner married households in 2002-2020. 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 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. *Managed Fin Accounts* is a dummy variable for ownership of managed financial accounts by professional financial institutions. *Mother Housewife* is a dummy variable that equals 1 if the mother of the household head is/was a housewife. 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.2: Robustness Checks - Portfolio share in risky asset classes

	(1) Risky Financial Assets	(2) Risky Financial Assets	(3) Risky Financial Assets
Separate Property	-0.038*	-0.044*	-0.038
	(0.023)	(0.026)	(0.025)
Female	-0.028***	-0.049***	-0.038***
	(0.007)	(0.008)	(0.010)
Female × Sep. Property	0.047***	0.078***	0.052***
	(0.012)	(0.016)	(0.016)
Risk Attitudes	✓		
Online Banking		✓	
Managed Fin. Accounts		✓	
Mother Housewife			✓
Households Characteristics	Yes	Yes	Yes
Survey Year FE	Yes	Yes	Yes
Observations	4156	3012	4113

Notes: The sample includes all two-earner married households in 2002-2020. 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. 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. *Managed Fin Accounts* is a dummy variable for ownership of managed financial accounts by professional financial institutions. *Mother Housewife* is a dummy variable that equals 1 if the mother of the household head is/was a housewife. 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.3: Empirical Gaps

	(1) % Risky Financial Assets Assets	(2) Risky Financial Assets	(3) Savings-to-Income Ratio
	Wife household head	Wife household head	Wife household head
Separate Property	0.023	0.047**	-0.043*
	(0.017)	(0.022)	(0.020)
Households Characteristics	Yes	Yes	Yes
Survey Year FE	Yes	Yes	Yes
Observations	1461	1461	1461

Notes: The sample includes all two-earner married households in 2002-2020 where the household head is the wife. This table reports 2SLS estimates from a model where the dependent variable is the share in risky financial assets in the household portfolio (column (1)), a binary variable that equals 1 if households hold wealth in risky assets (column (2)) and the ratio between savings and total household income (column (3)). Separate property is instrumented using a dummy for residence in Catalonia or the Balearic Islands. 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 Model Calibration and Theoretical Results

Table D.1: Husband savings calibration

Parameter		Data Source
	Married Couples Wife is the household head	
Household savings-to-income ratio	0.434	EFF
Husband savings-to-income ratio	0.241	

The average household savings-to-income ratio has been computed using the panel structure of the EFF survey data from 2002-2020. We measure savings as a flow, that is, savings refers to the change in total household financial savings in two consecutive waves. Income only includes labor income. The sample has been restricted to two-earner married couples above 25 years old, for which the wive is the most knowledgeable about household finances. The gender wage gap is 1.25 for these couples. Survey weights are applied to give consistent averages for the Spanish population

Table D.2: Wife savings calibration

Parameter		Data Source
	Married Couples Husband is the household head	
Household savings-to-income ratio	0.557	EFF
Wife savings-to-income ratio	0.192	
Wife share in risky assets	0.064	EFF

The average household savings-to-income ratio has been computed using the panel structure of the EFF survey data from 2002-2020. We measure savings as a flow, that is, savings refers to the change in total household financial savings in two consecutive waves. Income only includes labor income. The sample has been restricted to two-earner married couples above 25 years old, for which the husband is the most knowledgeable about household finances. The gender wage gap is 1.91 for these couples. The risky share for wives has been computed using a sample of divorced women in the same period. Survey weights are applied to give consistent averages for the Spanish population

Table D.3: Estimation results - Stochastic Income Process

Parameter	Married Couples
	Husband is the household head
σ_h^2	0.349
ρ_h	0.514
σ_w^2	0.297
ρ_w^2	0.574
$\bar{y}^h$	28305.80
$\bar{y}^w$	14819.79

Table D.4: Counterfactual - Divorce risk

	(1) Baseline	(2) Counterfactual	(3) Data
Gap in	$\delta = 0.24$	$\delta = 0$	
Risky assets share	1.5 p.p	0 p.p	2.3 p.p
Risky assets participation rates	4.7 p.p	0 p.p	4.7 p.p
Total savings-to-income ratio	-5.1 p.p	0 p.p	-4.3 p.p

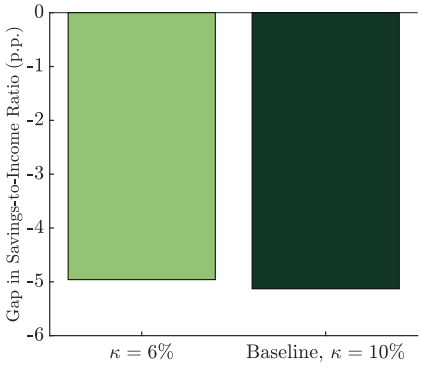


Figure D.1: Gap in Savings-to-income Ratio - Alternative Dissolution Costs of Marriage

This figure plots the property regime gap in the total savings-to-income ratio generated by the model in the baseline economy and counterfactual scenario. The gap is computed as the difference between separate-property and community-property households' outcomes.

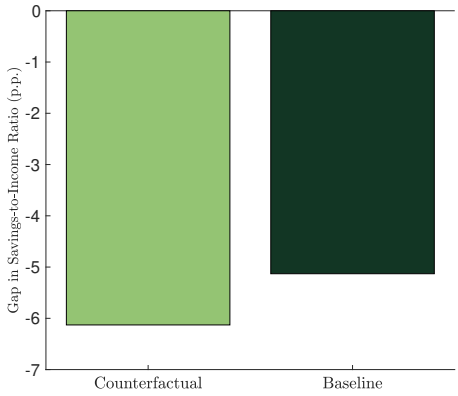


Figure D.2: Gap in Savings-to-income Ratio - Alternative Income Levels

This figure plots the property regime gap in the total savings-to-income ratio generated by the model in the baseline economy and counterfactual scenario. The gap is computed as the difference between separate-property and community-property households' outcomes.

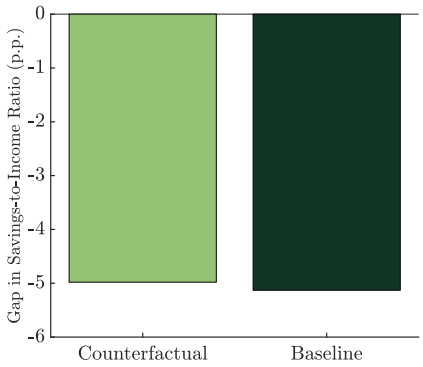
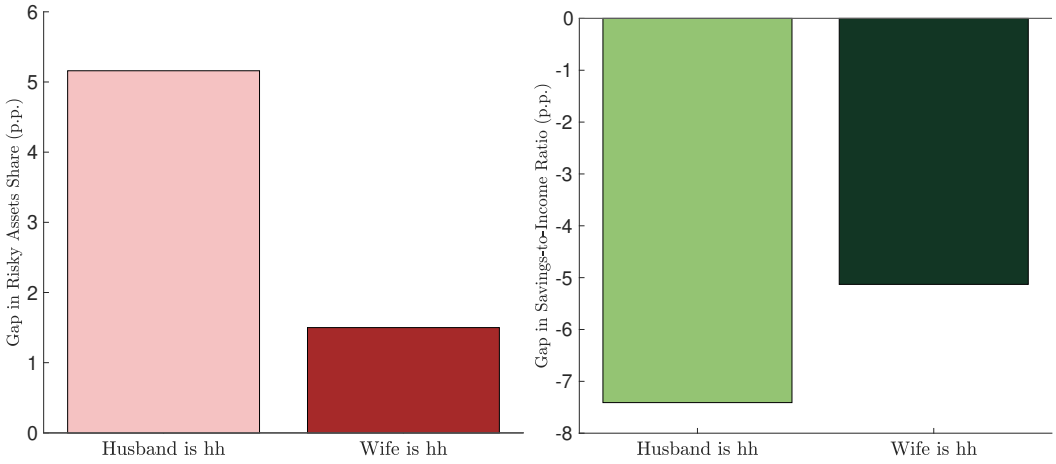


Figure D.3: Gap in Savings-to-income Ratio - Alternative Income Risk

This figure plots the property regime gap in the total savings-to-income ratio generated by the model in the baseline economy and counterfactual scenario. The gap is computed as the difference between separate-property and community-property households' outcomes.



(a) Risky Assets Share (b) Total savings-to-income Ratio

Figure D.4: Model Validation - Property Regime Gaps for Male-headed Households

This figure plots the property regime gap in the portfolio share in risky financial assets and the total savings-to-income ratio generated by the model, and the one estimated in the data. The gap is computed as the difference between separate-property and community-property households' outcomes. The darker bar refers to the 2SLS estimate of the gap and the corresponding 95% CI using EFF survey waves 2002-2020. The lighter bar refers to the model simulation outcome.