

## A Additional Tables

Table A1: Baseline Event Study: Divorce Rates

Specification:	Baseline Adjustments				Without Weights	Without Controls	Lagged Controls	Added Controls
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Q=-10	0.036 (0.028)	0.007 (0.010)	0.027*** (0.009)	0.011 (0.018)	0.037 (0.023)	0.009 (0.018)	0.009 (0.018)	0.001 (0.020)
Q=-9	0.010 (0.015)	0.010 (0.011)	0.019** (0.007)	0.012 (0.013)	0.035* (0.019)	0.010 (0.013)	0.011 (0.013)	0.007 (0.014)
Q=-8	0.011 (0.014)	0.005 (0.012)	0.014 (0.009)	0.009 (0.014)	0.030 (0.019)	0.008 (0.014)	0.009 (0.014)	0.003 (0.015)
Q=-7	0.007 (0.013)	0.005 (0.009)	0.012 (0.008)	0.008 (0.011)	0.027 (0.017)	0.006 (0.011)	0.007 (0.011)	0.001 (0.013)
Q=-6	-0.003 (0.010)	-0.007 (0.009)	-0.000 (0.008)	-0.004 (0.009)	0.008 (0.015)	-0.004 (0.010)	-0.004 (0.010)	-0.009 (0.011)
Q=-5	0.001 (0.008)	0.003 (0.009)	0.007 (0.008)	0.004 (0.010)	0.019 (0.013)	0.003 (0.010)	0.003 (0.010)	-0.000 (0.011)
Q=-4	-0.006 (0.012)	-0.004 (0.010)	-0.001 (0.009)	-0.003 (0.011)	0.014 (0.013)	-0.004 (0.011)	-0.004 (0.012)	-0.007 (0.011)
Q=-3	0.010 (0.008)	0.003 (0.007)	0.007 (0.007)	0.005 (0.008)	0.017* (0.010)	0.005 (0.008)	0.005 (0.008)	0.003 (0.008)
Q=-2	0.011* (0.006)	0.009* (0.005)	0.011** (0.005)	0.009* (0.005)	0.014* (0.007)	0.009 (0.006)	0.008 (0.006)	0.007 (0.006)
Q=0	0.013 (0.009)	0.013 (0.011)	0.012 (0.011)	0.012 (0.011)	0.020** (0.010)	0.013 (0.010)	0.012 (0.010)	0.010 (0.011)
Q=1	0.055*** (0.017)	0.049*** (0.018)	0.048*** (0.017)	0.051*** (0.017)	0.064*** (0.022)	0.052*** (0.017)	0.051*** (0.018)	0.052*** (0.017)
Q=2	0.070*** (0.023)	0.075*** (0.021)	0.070*** (0.021)	0.074*** (0.023)	0.086** (0.033)	0.074*** (0.023)	0.073*** (0.023)	0.080*** (0.024)
Q=3	0.079*** (0.020)	0.089*** (0.020)	0.081*** (0.019)	0.085*** (0.021)	0.091*** (0.029)	0.085*** (0.021)	0.086*** (0.022)	0.094*** (0.022)
Q=4	0.071** (0.029)	0.078*** (0.027)	0.071** (0.027)	0.075** (0.029)	0.078** (0.038)	0.075** (0.030)	0.076** (0.029)	0.085** (0.033)
Q=5	0.083*** (0.028)	0.095*** (0.027)	0.085*** (0.026)	0.090*** (0.027)	0.091*** (0.033)	0.089*** (0.028)	0.089*** (0.027)	0.098** (0.036)
Q=6	0.114*** (0.033)	0.126*** (0.031)	0.111*** (0.031)	0.116*** (0.031)	0.123*** (0.038)	0.116*** (0.032)	0.117*** (0.030)	0.130*** (0.043)
Q=7	0.143*** (0.034)	0.152*** (0.029)	0.128*** (0.027)	0.130*** (0.026)	0.149*** (0.040)	0.129*** (0.027)	0.129*** (0.026)	0.152*** (0.036)
Q=8	0.161*** (0.044)	0.179*** (0.035)	0.147*** (0.029)	0.139*** (0.024)	0.149*** (0.034)	0.137*** (0.025)	0.138*** (0.024)	0.166*** (0.034)
Q=9	0.178*** (0.044)	0.183*** (0.033)	0.141*** (0.028)	0.125*** (0.025)	0.120*** (0.036)	0.124*** (0.025)	0.125*** (0.024)	0.133*** (0.025)
Q=10	0.117*** (0.035)	0.160*** (0.029)	0.114*** (0.024)	0.093*** (0.024)	0.105*** (0.033)	0.092*** (0.024)	0.091*** (0.024)	0.100*** (0.032)
Observations	1,664.00	1,664.00	1,664.00	1,664.00	1,664.00	1,664.00	1,632.00	1,596.00
R-squared	0.25	0.82	0.87	0.89	0.87	0.89	0.90	0.89
Mean Dep. Var.	0.30	0.30	0.30	0.30	0.32	0.30	0.30	0.30
Time FE	X	X	X	X	X	X	X	X
State FE		X	X	X	X	X	X	X
State x Time			X	X	X	X	X	X
State x Time-sq				X	X	X	X	X

SOURCE: INEGI divorce statistics.

NOTES: Coefficients are event-study dummy variables,  $\beta_{mt}$ , from a weighted least squares estimation of Equation 1. Weights are based on the state population over age 15. The period before the reform (-1) is the excluded period. Each period (Q) represents a quarter-year. Baseline controls include annual state economic activity and the state-level unemployment rate. The divorce rate is reported per 1,000 persons over age 15. Fixed effects are included at the state level, quarter, year, and quarter-year. The full specification includes linear and quadratic time trends. Robust standard errors are clustered at the state level. Significance levels reported at the 10, 5, and 1 percent levels. *Without Weights* shows the results without population weights. *Without Controls* excludes all controls. *Lagged Controls* takes one year lags of the main controls. *Added Controls* adds controls for the death rate, the marriage rate, the birth rate, and the fetal death rate in each state.

Table A2: Description of INEGI Divorce Data

Variable(s)		Detailed Description
1	Divorce Procedure	Judicial v. Administrative
2	Registration Location	State, Municipality, Location, and Size of Place
3	Marriage Characteristics	Location and Date of Marriage
4	Dates of Divorce	Filed, Sentenced (and Executed (>2015))
5	Divorce Person	Who Initiated the Divorce and Divorce Favor
6	Cause of Divorce, Including:	1 Mutual consent
		2 Adultery or sexual infidelity
		3 Illegitimate child
		4 Prostitution
		5 Incitement to violence
		6 Corruption and / or mistreatment of children
		7 Chronic or incurable disease, impotence or incurable infertility
		8 Insane mental illness or the state of interdiction declared
		9 Separation from the conjugal home for more than 1 year, with or without just cause
		10 Leaving home for more than 3 or 6 months without just cause
		11 Declaration of absence or presumption of death
		12 Threats or insults or intrafamily violence
		13 Refusal to contribute voluntarily or by judgment of the family judge to the maintenance of the home
		14 Slanderous accusation
		15 Having committed an intentional or infamous crime
		16 Habits of gambling, drunkenness or drugs
		17 Committing a criminal act against a spouse
		18 Character incompatibility
		19 Separation for 2 years or more regardless of the reason
		20 Bigamy
		21 The wife does not move with her husband when changing residence, in or out of the country
		22 If a spouse filed for divorce because of unjustified cause, the defendant can divorce 3 months after the last judgment
		23 Assisted fertilization without spousal consent
		24 Preventing one spouse from performing another lawful activity
		25 The wife acknowledges a child born before the marriage without the husband's consent
		26 Use of permanent sterilization method without the consent of the spouse
		27 Bisexuality manifested, or intention or change of sex by medical or surgical treatment
		28 Unilateral
7	Alimony Assignment	Spouse, Spouse and Child, Only Children
8	Spouse Characteristics	1 Nationality
		2 Age
		3 Year of Birth
		4 Previous Marital Status
		5 Residence
		6 Employment
		7 Education
		8 Sex

SOURCE: INEGI divorce statistics.

Table A3: Event Study: Divorces from Nearby States and Divorce Length

Specification:	Share of Divorces from Different States			Divorce Length
	One Spouse (1)	Both Spouses (2)	Marriage Filed (3)	(In Months) (4)
Q=-10	0.014* (0.007)	0.003 (0.002)	-0.005 (0.008)	2.089** (0.826)
Q=-9	0.012** (0.005)	0.002 (0.001)	0.002 (0.006)	1.841** (0.797)
Q=-8	0.006 (0.005)	0.001 (0.001)	-0.003 (0.006)	1.253** (0.584)
Q=-7	0.006 (0.004)	0.001 (0.001)	-0.002 (0.004)	1.135** (0.493)
Q=-6	0.009** (0.004)	0.000 (0.001)	-0.007 (0.004)	0.880** (0.394)
Q=-5	-0.002 (0.005)	0.001 (0.000)	-0.005 (0.004)	0.628 (0.384)
Q=-4	-0.004 (0.006)	0.000 (0.001)	-0.004 (0.004)	0.268 (0.250)
Q=-3	-0.006 (0.005)	-0.001 (0.000)	-0.003 (0.004)	0.759* (0.376)
Q=-2	-0.007 (0.005)	-0.000 (0.001)	-0.007 (0.004)	0.238 (0.195)
Q=0	-0.003 (0.003)	-0.001 (0.001)	-0.004 (0.005)	-0.135 (0.383)
Q=1	-0.006* (0.003)	-0.001 (0.001)	0.024 (0.020)	-0.368 (0.242)
Q=2	-0.006** (0.003)	-0.001 (0.001)	0.023 (0.023)	-0.920*** (0.323)
Q=3	-0.007** (0.003)	-0.001 (0.001)	0.025 (0.023)	-1.282*** (0.311)
Q=4	-0.003 (0.004)	-0.001 (0.001)	0.029 (0.023)	-0.815 (0.592)
Q=5	-0.007** (0.003)	-0.002* (0.001)	0.024 (0.019)	-1.067** (0.509)
Q=6	-0.012*** (0.004)	-0.002** (0.001)	0.019 (0.019)	-1.191*** (0.320)
Q=7	-0.008** (0.004)	-0.001 (0.001)	0.031 (0.025)	-1.880*** (0.374)
Q=8	-0.011*** (0.004)	-0.001 (0.001)	0.035 (0.025)	-1.318** (0.502)
Q=9	-0.016* (0.009)	-0.001 (0.001)	0.033 (0.023)	-1.779*** (0.421)
Q=10	-0.018** (0.008)	-0.002* (0.001)	0.008 (0.009)	-1.303** (0.520)
Observations	1,664.00	1,664.00	1,664.00	1,664.00
R-squared	0.86	0.57	0.85	0.77
Mean Dep. Var.	0.06	0.01	0.10	6.18
Baseline FE & TT	X	X	X	X

SOURCE: INEGI divorce statistics.

NOTES: Coefficients are event-study dummy variables,  $\beta_{m,t}$ , from a weighted least squares estimation of Equation 1. Weights are based on the state population over age 15. The period before the reform (-1) is the excluded period. Each period (Q) represents a quarter-year. Baseline controls include annual state economic activity and the state-level unemployment rate. The divorce rate is reported per 1,000 persons over age 15. Fixed effects are included at the state level, quarter, year, and quarter-year. The full specification includes linear and quadratic time trends. Robust standard errors are clustered at the state level. Significance levels reported at the 10, 5, and 1 percent levels. Columns (1)-(3) show the share of divorce filings from residents (or marriages) of other states. Column (4) is the average length of the divorce process, measured in months.

## B Labor Supply, Marriage Rates, and Birth Rates

There are many studies that analyze how female labor force participation responds to unilateral divorce legislation. For example, ? shows that women increased their labor force participation as a result of the wave of unilateral divorce laws in the United States. This increased labor supply indicates that both married and unmarried women are insuring themselves against divorce by remaining active in the labor force. The liberalization of divorce prevents women from participating in household production which has little market value. As the division of spousal labor force participation and household tasks might vary significantly by country, these results from the United States cannot be immediately applied to the Mexican context. Furthermore, because the United States reforms occurred in the 1970s, the global cultural context might have shifted in the past 40 years, there might be a muted effect. In Figure B.I Panel A we consider how the unilateral reform affects both male and female employment. After the reform, there does not appear to be a shift in female or male employment.

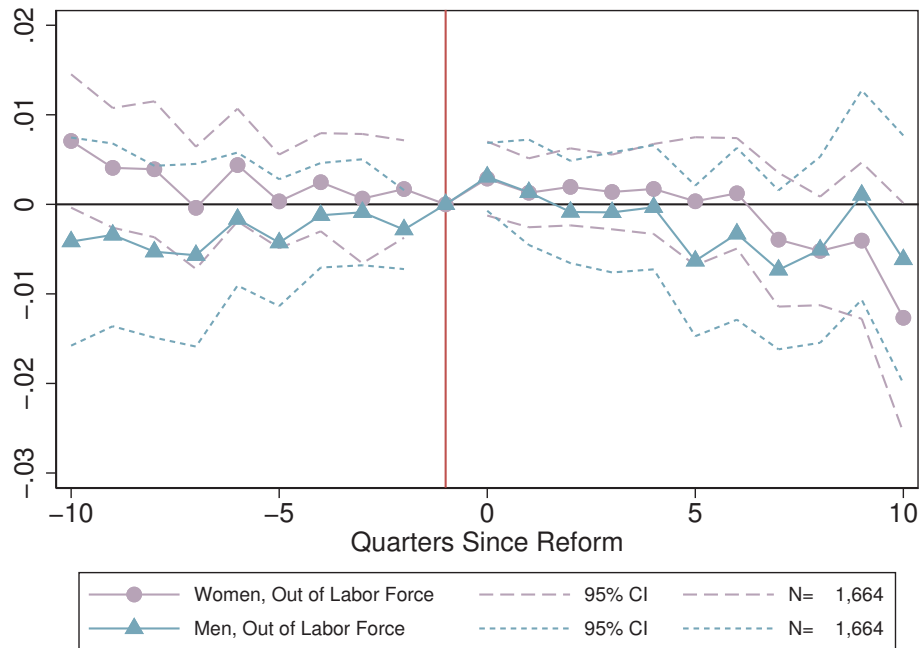
Divorce legislation may also affect whether individuals are willing to enter into marriages and change the overall marriage rate in adopting states. Having easier access to divorce could raise the likelihood that couples marry if individuals view divorce as an easy exit option. Changing cultural norms around divorce, however, may have the reverse effect if the societal status of marriage changes and individuals have a lower desire to marry. To test these stories, we plot the marriage rate in Figure B.II. The coefficients reveal that neither story is definitive. Marriage rates are relatively constant after the passage of unilateral divorce, with the coefficients hovering around zero for the ten periods after the reform.

As divorces may also affect the decision to have children once the couple is married we next test the birth rate in addition to the marriage rate. In Figure B.II the birth rate is plotted in yellow. Following the legislation, the birth rate declines slightly, but the confidence intervals are quite wide surrounding the point estimates. In the immediate wake of the reform, neither the birth rate nor the marriage rate substantially changes. As with the main results, it is possible that with a longer series of data the effect for either outcomes may become more apparent as the societal norms begin to shift.

Figure B.I: Effect of Reform on Labor Force Participation  
Panel A: Employment



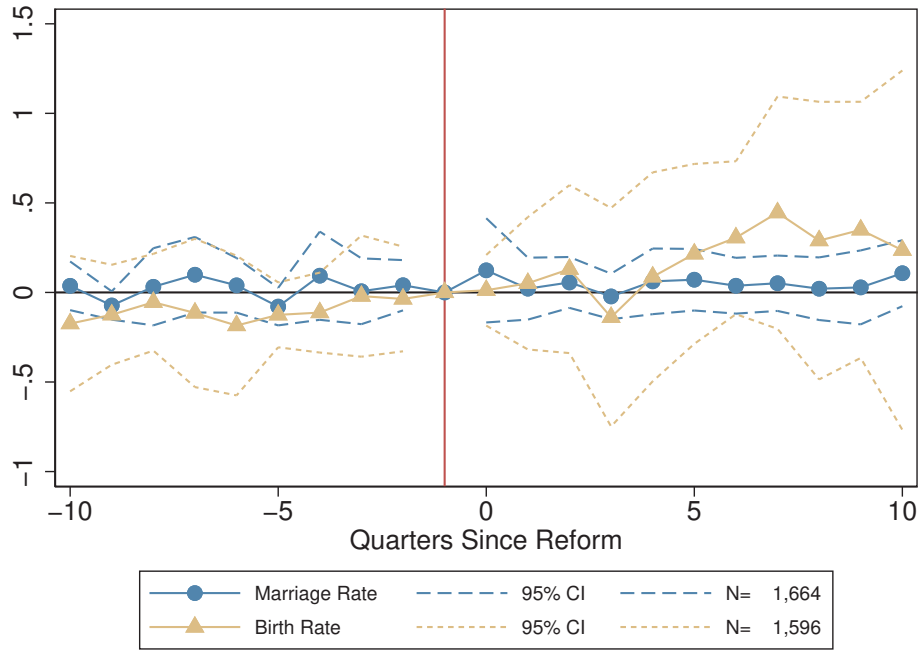
Panel B: Out of Labor Force



SOURCE: INEGI divorce statistics.

NOTES: Plotted coefficients are event-study dummy variables,  $\beta_Q$ , from a weighted least squares estimation of Equation 1. Each plotted point represents the time before and after the unilateral reform, excluding the period just before adoption  $Q = -1$ . Weights are based on the state population over age 15. Solid lines represent point estimates. Dashed and dotted lines display the 95 percent confidence intervals. Fixed effects are included at the state level, quarter, year, and quarter-year. The full specification includes linear and quadratic time trends. Baseline controls include annual state economic activity and the state-level unemployment rate. Robust standard errors are clustered at the state level.

Figure B.II: Effect of Reform on Marriage and Birth Rates



SOURCE: INEGI divorce statistics.

NOTES: Plotted coefficients are event-study dummy variables,  $\beta_Q$ , from a weighted least squares estimation of Equation 1. Each plotted point represents the time before and after the unilateral reform, excluding the period just before adoption  $Q = -1$ . Weights are based on the state population over age 15. Solid lines represent point estimates. Dashed and dotted lines display the 95 percent confidence intervals. Fixed effects are included at the state level, quarter, year, and quarter-year. The full specification includes linear and quadratic time trends. Baseline controls include annual state economic activity and the state-level unemployment rate. Robust standard errors are clustered at the state level.

## C Model

We present a collective household model with endogenous divorce. The goal of the model is to illustrate how moving from a mutual consent to a unilateral divorce regime affects divorce rates. We summarize a simple version of the ? model, with a particular focus on the case where unilateral divorce increases, as this matches both what we observe in the data, as well as certain characteristics of the Mexican context.

The model satisfies many of the features of the Becker-Coase theorem, but differs in how public goods are shared within the marriage and upon divorce. For the Becker-Coase theorem to hold, utility must be transferable between spouses within the marriage and post-divorce, and the exchange rate of utilities of the two partners should not depend on the marital status. In our context, we do not assume utility is transferable upon divorce.<sup>1</sup> The main implication of the model is that divorce rates can increase under a unilateral divorce regime. Moreover, the magnitude of this increase is determined by how marital income and wealth are divided upon divorce, as well as each spouse's unhappiness within the marriage.

### C.1 Setup

The household consists of a husband and a wife denoted by  $h$  and  $w$ , respectively. The household consumes two quantities over which each spouse derives utility: a private good  $x$ , and a public good  $X$  that is jointly consumed in marriage, but not in divorce. Denote the utility of a single person with

$$v_m(x, X) = x_m + x_m X \quad (1)$$

and if the person is part of a couple,

$$u(x, X) = X + x_m X + \theta_m, \quad m = w, h \quad (2)$$

where  $\theta_m$  is a match-specific shock.<sup>2</sup> The parameter  $\theta_m$  can be thought of as the utility each spouse derives from marriage that is unrelated to material consumption. We normalize the price of the private good to 1 and let  $P$  denote the price of the public good. Note that the marginal utility from the private good is increasing in  $X$  and the same for both spouses. This is necessary for utility to be transferable within the marriage. For simplicity, and to highlight the relevant mechanisms, each spouse has identical preferences that are independent of the marital status.

In the first period, couples are married and bargain over consumption levels of the private and public good. Consistent with the standard formulation of collective household models, the final allocation is assumed to be Pareto efficient, though no bargaining process is specified. At the end of the first period, each spouse receives the match-specific shock  $\theta_h$  and  $\theta_w$ . Given these shocks, the couple then decides in the second and final period to remain married or to divorce. The couple is allowed to renegotiate the terms of the marriage given the new situation.

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<sup>1</sup>The further we deviate from the conditions of the Becker-Coase Theorem, the more likely divorce rates are to increase as a result of unilateral reforms. We focus on one likely violation.

<sup>2</sup>More general functional forms for utility may not result in utility being transferable within the marriage, violating the Becker-Coase theorem.

Under certain conditions (discussed below), it will be infeasible for the couple to reallocate the consumption goods in such a way that it is optimal for one or both of the spouses to want to remain married. Then, a divorce will occur depending on the divorce regime (mutual consent or unilateral).

Given the simplicity of the utility functions, the efficient level of  $X$  in marriage is given by

$$X = \min\left(\frac{y}{P}, \frac{y+2}{2P}\right) \quad (3)$$

where  $y > 2$  is household income. Then  $X = \frac{y+2}{2P}$  and  $x_m = \frac{y-2}{2}$  for  $m = h, w$ . For any consumption bundle that is efficient,  $x_m > 0$  for  $m = h, w$ , and  $x_h + x_w = \frac{y-2}{2}$ .

With Pareto efficiency, each spouse's utility within marriage is given by

$$U_m^M = (1 + x_m)\frac{2+y}{2P} + \theta_m, \quad m = w, h \quad (4)$$

and the Pareto frontier is then,

$$U_h^M + U_w^M = \frac{1}{4} \frac{(2+y)^2}{P} + \theta_h + \theta_w \quad (5)$$

which satisfies transferable utility as the slope of the Pareto frontier is  $-1$ .<sup>3</sup> Figure B.I illustrates this curve. Note that we have assumed that the sum of marriage-specific shocks are negative. If they were not, the utility frontier for marriage would lie entirely outside the utility frontier for divorce, and couples would always remain married.<sup>4</sup> While this may be true for some marriages, we focus on a setting where there is a potential for divorce. Given each spouse's relative bargaining power (determined by e.g., marriage market conditions, or individual wages), the husband and wife receive utility  $\bar{U}_h^M$  and  $\bar{U}_w^M$  from marriage respectively. This outcome is given by the point  $M$  in Figure B.I.

We now consider each spouse's utility should they divorce. We focus on the case where goods that are public in marriage become private in divorce, such as housing or heating expenditures.<sup>5</sup> The key parameter in determining post-marital utility is  $\beta$ , which describes how household income and assets are allocated post marriage. Whether  $\beta$  favors one particular spouse has large implications for the expected magnitude of changes in divorce rates, as we illustrate below. We assume that the husband receives  $\beta y$  of the income, with  $\beta$  between 0 and 1. The wife receives  $(1 - \beta)y$ .

The ex-husband's problem is given by

$$\max_{x_h, X_h} X_h + (\beta y - P X_h) X_h \quad (6)$$

which results in the following bundle of goods:  $(X_h, x_h) = (\frac{1+\beta y}{2P}, \frac{\beta y - 1}{2})$  and a utility in divorce for the husband of  $U_h^D = \frac{(1+\beta y)^2}{4P}$ .

<sup>3</sup>There are special cases where this does not hold (e.g., if  $x_m = 0$ ) which we ignore for simplicity.

<sup>4</sup>This feature of the model is due to the existence of joint consumption of public goods within the marriage.

<sup>5</sup>An alternative case would be if public goods remained public in divorce (e.g., if child wellbeing were a public good). See ? for more details.



The ex-wife's problem in divorce is similarly given by

$$\max_{x_w, X_w} X_w + ((1 - \beta)y - PX_w)X_w \quad (7)$$

which results in consumption levels of  $(X_w, x_w) = (\frac{(1-\beta)y+1}{2P}, \frac{(1-\beta)y-1}{2})$ , and a utility in divorce of  $U_w^D = \frac{(1+(1-\beta)y)^2}{4P}$ .

The Pareto frontier once the couple divorces is given by

$$U_w^D = \frac{(2 + y - 2\sqrt{PU_h^D})^2}{4P} \quad (8)$$

Importantly, we are no longer in a setting where utility is transferable as the slope of the Pareto frontier is no longer  $-1$ . Instead, it is given by

$$\frac{dU_w^D}{dU_h^D} = -\frac{1 + (1 - \beta)y}{1 + \beta y} \quad (9)$$

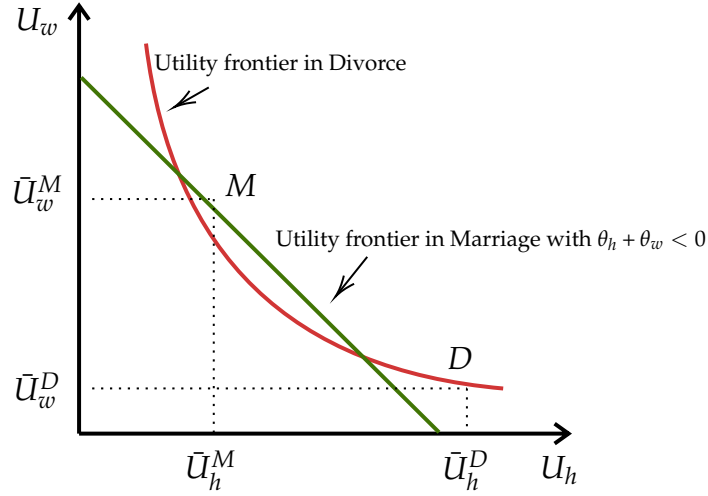
which is convex and is illustrated in Figure B.I. Therefore, it is possible that the Pareto frontiers for divorce and marriage intersect provided the marriage-specific shocks are particularly negative. Given each spouse's relative bargaining power, the husband and wife receive utility  $\bar{U}_h^D$  and  $\bar{U}_w^D$  from divorce, respectively. This outcome is given by the point  $D$  in Figure B.I.

## C.2 Model Implications

We now summarize several of the key implications of the above model and discuss how they apply to the Mexican context. Several points are important. First, the Becker-Coase theorem does not entirely hold since public goods become private when couples divorce resulting in utility no longer being transferable. Second, the match-specific shocks  $\theta_m$  are essential in determining whether the couple divorces. Given that couples gain from the joint consumption of public goods, couples will only divorce if they receive a particularly poor realization of the parameters  $\theta_m$ . Specifically, divorce will only be a possibility if  $\theta_h + \theta_w < 0$  as the Pareto frontiers of marriage and divorce will now intersect. Finally, how evenly assets are divided when couples divorce determines whether or not unilateral divorce increases divorce rates, and the magnitude of this change. We discuss these points with an example below that is illustrated in Figure B.I.

Suppose that the divorce legislation is relatively favorable to men, resulting in  $\beta$  being close to one. Furthermore, suppose that the match-specific shocks are significantly more favorable to women relative to men, with  $\theta_w > 0 > \theta_h$ . Intuitively, from this scenario we can see that women will place a significantly higher value on remaining married as the marital assets will be primarily allocated to the husband should the couple divorce, and women receive more utility from marriage, as  $\theta_w > 0 > \theta_h$ . Then if mutual consent is required for divorce, the wife will veto any divorce allocation that results in her being worse off than she would be when married. Is there a way for the husband to compensate her post-divorce to incentivize him to agree to the divorce? Given the situation illustrated in Figure B.I, it is not possible. There is no point on the utility frontier in divorce that gives the wife a utility greater than  $\bar{U}_w^m$  that does not make the husband worse off than he would be if he remained married. As a result, the

Figure B.I: Pareto Frontier Under Marriage and Divorce



husband is not able to sufficiently compensate his wife to incentivize her to agree to a divorce.

Next, suppose that either spouse could file for divorce unilaterally. In this case, the wife can no longer veto the husband's divorce decision. She can potentially compensate her husband to ensure he does not file for divorce. However, in the situation presented in Figure B.I, this is not possible; The husband's utility in divorce,  $\bar{U}_h^D$ , is greater than any Pareto efficient utility level he could achieve in marriage. Moreover, the closer  $\beta$  is to 1, the harder it is for the wife to compensate her husband to prevent him from divorcing.

The above example is mostly consistent with what we observe in the data. We do expect husbands to be more financially secure upon divorce, and therefore we expect  $\beta$  to be closer to one than one-half. We also observe men filing for divorce more frequently after the reforms. The above example is not representative of all married couples in Mexico, as we see women filing for divorce more frequently as well. Given the model, there are two potential explanations for this. First, women could receive a particularly negative marriage shock  $\theta_w$ . If there husband were abusive, for example, or if the wife were particularly unhappy in the marriage, she could file for divorce and it would be infeasible for the husband to compensate her enough to remain married. Alternatively,  $\beta$  for certain marriages may be more favorable to women (e.g., wife women have full custody of the children), and again, it would be difficult for the husband to adequately compensate the wife to remain married.