

# Spousal Conflict and Divorce

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# Research Focus

## Background:

- spousal conflict and divorce are empirically relevant
- limited research on spousal conflict
- unexplored richness of data: National Survey of Families and Households (NSFH)

## Research goals:

- endogenize conflict in intact marriage, along with cooperation and divorce
- evaluate effects of shorter separation requirements
- evaluate effects of stronger child support enforcement

# NSFH Questions about Spousal Conflict

Dispute areas and frequencies:

“The following is a list of subjects on which couples often have disagreements. How often, if at all, in the past year have you had open disagreements about each of the following:

household tasks, money, spending time together, sex, in-laws, children?”

responses: “never”, “once a month or less”, ..., “almost every day”

Dispute resolution process:

“There are various ways that married couples deal with serious disagreements. When you have a serious disagreement with your husband/wife, how often do you:

discuss your disagreements calmly, argue heatedly or shout at each other?”

responses: “never”, “seldom”, ..., “always”

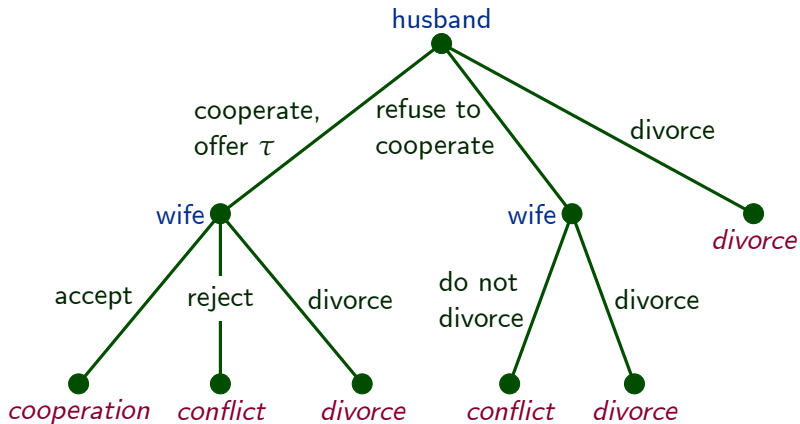
# Marital State

Marital state: status of a couple as of NSFH wave 2 (1992-94):

- Conflict: intact couple where husband and wife:
  - disagree about at least one aspect of marriage
  - have disputes several times a week or more often
  - seldom calmly discuss disputes or often shout at each other
- Cooperation: intact couple not in state of conflict
- Divorce: couple divorced or separated

Marital State	Frequency	Weighted Fraction, %
Cooperation	2,948	78.65
Conflict	416	10.27
Divorce	514	11.08
Total	3,878	100.00

# Game Structure



# Information Asymmetry

Two individual traits:

- Bargaining strength: “soft” ( $S$ ) vs. “hard” ( $H$ ) bargainer
- Divorce prospect: “pessimist” ( $P$ ) vs. “optimist” ( $O$ )

Husband's type and wife's type combine trait levels:

- type  $\in \{HO, HP, SO, SP\}$
- e.g., type  $HO$  stands for “hard bargainer – optimist”

Knowledge about types:

- type is private information
- husband has beliefs  $(\delta^{HO}, \delta^{HP}, \delta^{SO}, \delta^{SP})'$  about wife

# Estimated Divorce Payoffs

Variable	Husband		Wife	
	Coeff.	Std. Err.	Coeff.	Std. Err.
optimist's premium	3.750**	(0.411)	0.668**	(0.160)
male-specific availability ratio	0.321	(0.334)	—	
female-specific availability ratio	—		0.946**	(0.481)
$\frac{1}{2}$ year $\leq$ separation $\leq$ 1 year	-0.229	(0.163)	0.081	(0.150)
separation > 1 year	-0.178	(0.132)	-0.256 <sup>†</sup>	(0.159)
collection rate	-0.162	(0.263)	1.989**	(0.901)
coll. rate $\times$ high school, husband	-1.645**	(0.734)	—	
coll. rate $\times$ college, husband	-0.888	(0.652)	—	
coll. rate $\times$ high school, wife	—		-1.820**	(0.823)
coll. rate $\times$ college, wife	—		-0.829	(0.669)

\*\* and <sup>†</sup> denote significance at 5 and 11% levels, respectively

# Estimated Cooperation Payoff

Variable	Coeff.	Std. Err.
constant	4.496**	(0.689)
age, husband's	0.090**	(0.014)
age, absolute difference	-0.111**	(0.029)
black husband	0.435	(0.319)
catholic husband	0.287	(0.203)
religion, difference	-0.033	(0.103)
high school, husband	0.067	(0.147)
college, husband	0.120	(0.222)
education, difference	-0.231	(0.167)
wife's children	-0.451**	(0.168)

\*\* denotes significance at 5% level



# Estimated Conflict Payoffs

Variable	Husband		Wife	
	Coeff.	Std. Err.	Coeff.	Std. Err.
constant	-2.522**	(0.753)	-1.170**	(0.592)
hard bargainer's premium	2.274**	(0.657)	3.503**	(0.396)
age, husband's	0.102**	(0.019)	-0.033**	(0.008)
age, absolute difference	-0.113**	(0.041)	0.061**	(0.024)
black husband	-0.982*	(0.584)	0.821**	(0.287)
catholic husband	0.641*	(0.344)	0.218	(0.160)
religion, difference	-0.799**	(0.360)	0.215	(0.149)
high school, husband	0.144	(0.193)	-0.416**	(0.207)
college, husband	0.251	(0.275)	-0.818**	(0.235)
education, difference	-0.164	(0.204)	0.162	(0.141)
wife's children	0.333**	(0.162)	0.643**	(0.175)

\*\* and \* denote significance at 5 and 10% levels, respectively

# Counterfactuals

Experiment A: elimination of separation periods

Experiment B: perfect child support enforcement

Distribution of Couples (%)

Marital State	Baseline	Experiment A	Experiment B
Cooperation	78.65	78.51	82.55
Conflict	10.27	9.49	8.35
Divorce	11.08	12.00	9.10
Total	100.00	100.00	100.00

# Robustness and Out-of-Sample Performance

Analysis of robustness and LM specification tests:

- inclusion of potentially endogenous variables (common children, marital duration, and home ownership)
- impact of legal property division regimes (community property, common law, and equitable distribution)

Out-of-sample predictive ability:

- use NSFH wave 3 data on couple status 5.5 years after wave 2
- actual divorce rate: 7.99%
- predicted divorce rate: 8.88%

# Conclusion

## Key contributions:

- spousal conflict is equilibrium outcome of bargaining
- model allows for Pareto inefficient outcomes and information asymmetries
- conflict indicator incorporates data on dispute resolution
- policy variables in divorce payoffs

## Directions for future research:

- multi-issue bargaining
- dynamic bargaining

# Appendix Outline

- National Survey of Families and Households (NSFH)
- NSFH Evidence on Spousal Conflict
- Parameterized Payoffs
- Parameterized Type Probabilities and Beliefs
- Demographic Variables
- Location-Specific Variables
- Beliefs and Opinions
- Estimated Type Probabilities and Beliefs

# National Survey of Families and Households (NSFH)

Main features of NSFH:

- nationally representative panel of households
- 3 data collection waves: 1987-88, 1992-94, and 2001-02
- husband and wife answered separate questionnaires

NSFH includes questions on:

- marital disputes: frequency, areas, resolution process
- respondent's own happiness after hypothetical divorce
- beliefs about partner's happiness after hypothetical divorce

Sample of analysis: 3,878 married couples

# NSFH Evidence on Spousal Conflict

## Dispute frequencies:

- once a week or more: 39 percent
- several times a week or more: 23 percent
- almost everyday: 11 percent

## Dispute resolution process:

- seldom/never calmly discuss disputes: 27 percent
- often/always heatedly argue or shout: 10 percent

# Parameterized Payoffs

	Husband	Wife
<i>Cooperation:</i>	$u_h = x' \alpha_h - \tau + \theta_1$	$u_w = x' \alpha_w + \tau + \theta_3$
<i>Conflict:</i>	$v_h^S = x' \beta_h + \theta_2$	$v_w^S = x' \beta_w + \theta_4$
	$v_h^H = v_h^S + \beta_h^H$	$v_w^H = v_w^S + \beta_w^H$

$$\theta_{4 \times 1} \sim i.i.d. N(0, \Sigma)$$

<i>Divorce:</i>	$y_h^P = z_h' \gamma_h$	$y_w^P = z_w' \gamma_w$
	$y_h^O = y_h^P + \gamma_h^O$	$y_w^O = y_w^P + \gamma_w^O$

- $x$ : demographic variables;  $z_h, z_w$ : location-specific variables
- type-specific constants are positive:  $\beta_h^H, \beta_w^H, \gamma_h^O, \gamma_w^O > 0$
- cannot separately identify  $\alpha_h$  and  $\alpha_w$ , estimate  $\alpha_h + \alpha_w$



# Parameterized Type Probabilities and Beliefs

Type probabilities (Degan & Merlo, 2006):

$$\pi_h^k = \frac{\exp(a'_h \lambda_h^k)}{\sum_j \exp(a'_h \lambda_h^j)}, \quad \pi_w^l = \frac{\exp(a'_w \lambda_w^l)}{\sum_j \exp(a'_w \lambda_w^j)}$$

- $k$ : husband's type,  $l$ : wife's type
- $a_h, a_w$ : observed spousal opinions about own happiness

Husband's beliefs:

$$\delta^l = \frac{\exp(b' \rho^l + \eta^l)}{\sum_j \exp(b' \rho^j + \eta^j)}, \quad \eta \sim i.i.d. N(0, \Omega)_{3 \times 1}$$

- $b$ : observed husband's beliefs about wife's happiness

# Demographic Variables

Variable	Mean	Std. Dev.	Min	Max
children < 6 year old	0.45	(0.73)	0	5
children $\geq$ 6 year old	0.57	(0.94)	0	5
children, wife's	0.14	(0.47)	0	5
marital duration	14.51	(13.23)	0	63.58
home ownership	0.75	(0.43)	0	1
age, husband's	41.02	(13.75)	17	90
age, abs. difference	3.62	(3.84)	0	38
black husband	0.09	(0.29)	0	1
catholic husband	0.23	(0.42)	0	1
religion, difference	0.33	(0.47)	0	1
high school, husband	0.51	(0.50)	0	1
college, husband	0.33	(0.47)	0	1
education, difference	0.38	(0.48)	0	1

# Location-Specific Variables

- Availability ratio (Goldman et al., 1984):
  - specific to county, sex, race, age, and education
  - source: 1990 Census (5-percent PUMS)
- State-specific separation period requirements:
  - sources: Friedberg (1998), Freed & Walker (1991)
- State-specific CSE collection rate (Nixon, 1997):
  - sources: Office of CSE reports to Congress

Variable	Mean	Std. Dev.	Min	Max
male-specific availability ratio	1.25	(0.24)	0.56	2.43
female-specific availability ratio	0.84	(0.16)	0.22	1.45
$\frac{1}{2}$ year $\leq$ separation $\leq$ 1 year	0.18	(0.39)	0	1
separation $>$ 1 year	0.33	(0.47)	0	1
CSE collection rate	0.19	(0.06)	0.06	0.35

# Beliefs and Opinions

- Husband reports what he believes about *his wife's* overall happiness after divorce
- Spouses report what they think about *their own* overall happiness after divorce

Variable	Mean	Std. Dev.	Min	Max
same happiness, belief	0.19	(0.39)	0	1
more happy, belief	0.08	(0.27)	0	1
same happiness, husband	0.17	(0.38)	0	1
more happy, husband	0.06	(0.23)	0	1
worthy person, husband	0.38	(0.49)	0	1
same happiness, wife	0.15	(0.36)	0	1
more happy, wife	0.07	(0.26)	0	1
worthy person, wife	0.42	(0.49)	0	1

# Estimated Type Probabilities and Beliefs

Spousal Type	True Types		Beliefs
	Husband	Wife	Husband
<i>HO</i> (hard bargainer – optimist)	0.097	0.038	0.148
<i>HP</i> (hard bargainer – pessimist)	0.148	0.222	0.037
<i>SO</i> (soft bargainer – optimist)	0.020	0.053	0.119
<i>SP</i> (soft bargainer – pessimist)	0.735	0.687	0.696