Comment on Edlund and Pande

“Why Have Women Become Left-Wing? The Political Gender Gap and the Decline in Marriage”

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Political Economy Group
Stanford Business School

For Wallis Conference on Political Economy
September 29, 2001
Outline of Discussion

• Political Economy and the Family
• Theory
  – What is the model?
  – Sensitivity
• Empirics
  – What do we learn?
  – Statistical power
  – Sensitivity
A New Marriage: Political & Family Economics

• An important institution
• Economic theory suggests families matter
• Dramatic changes in the family
  – Rise in divorce
  – Abortion and the pill
  – Single parenthood
  – Joint custody
The Question

• Why have women have moved left while men moved right?

• Robust fact
  • True in the US (NES data)
  • Checks out in GSS data
  • True in Europe (Eurobarometer Survey)
The Model: Assumptions

- Male wage distribution first-order dominates Female wages.
The Model: Assumptions

- Positive Assortive Mating
- Income sharing within Marriage
- Vote left if income < average; right if income > average

<table>
<thead>
<tr>
<th>Person</th>
<th>Wanda</th>
<th>Wayne</th>
<th>Mary</th>
<th>Mark</th>
<th>Rachel</th>
<th>Richie</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vote</td>
<td>Left</td>
<td>Left</td>
<td>Indiff.</td>
<td>Indiff.</td>
<td>Right</td>
<td>Right</td>
</tr>
</tbody>
</table>
1960s: Working class divorce

- Working class men and women still vote left
- Political gender gap unchanged
1980s: Middle class divorce

- Middle class men move right ("Reagan Democrats")
- Middle class women move left ("Soccer Moms")
- Political gender gap emerges

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Where is the Family Economics?

- Why get married?

- **Ricardian** theory of marriage:
  - He has market income
  - She can offer sex

- Marriage is the contract securing these gains from trade.
An Alternative Family Model

1. Marriage is productive
   - Complementarities and joint production
   - Public goods (kids)
   - Specialization and economies of scale

2. Intra-household distribution matters – Nash bargaining
   - Relevant threat point incorporates divorce threat
   - Share marital surplus

<table>
<thead>
<tr>
<th>If single...</th>
<th>Married outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earn market income</td>
<td>Marital rents</td>
</tr>
<tr>
<td>Nash bargained outcome:</td>
<td></td>
</tr>
<tr>
<td>Each obtains outside option</td>
<td></td>
</tr>
<tr>
<td>+ a share of marital rents</td>
<td></td>
</tr>
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Implications for Voting Behavior

• 1950s – Stable marriage
  Nash bargained distribution:
  – Earn outside option
  + share of marital rents (“love”)

• 1960s – Working class divorce
  – Political gender gap unchanged

• 1980s – Middle class divorce
  – Political gender gap unchanged
Sensitivity of Theoretical Model

• Despite a seemingly simple and appealing model, implications for voting behavior are extremely sensitive to small changes
  – Is marriage productive?
  – Efficacy of property division laws
  – Tax system
  – Policy space (redistribute all; don’t redistribute)
Evolution of the Political Gender Gap

% Female identifying with Dems - % Male identifying with Dems (Change since 1964)

Election Year

Raw Data
Evolution of the Political Gender Gap

% Female identifying with Dems - % Male identifying with Dems (Change since 1964)

Including rich set of controls (marital status, race, age, cohort, religion, education, family income)

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Raw Data

Add controls for "divorce risk"

Election Year

Evolution of the Political Gender Gap

Election Year

% Female identifying with Dems - % Male identifying with Dems (Change since 1964)
Evolution of the Political Gender Gap

% Female identifying with Dems - % Male identifying with Dems
(Change since 1964)

Election Year
% Women Democrat - % Men Democrat

Graphs by States in this CPS state grouping

% Currently divorced (CPS)
Each point represents a CPS-state grouping

Trends in State Divorce Rates and Political Gender Gaps

Trend in Divorce (CPS Measure)

Trend in Political Gender Gap
Measuring *Divorce Risk*

Two measures:

1. March CPS data on *stock* of the population that are *currently divorced*
   - Backward-looking measure
   - Restricts sample to 1964 onward
   - Restricted to 21 state-groupings
   - Small samples and large measurement error

2. Unilateral (no-fault) divorce laws
   - Not much of an effect on divorce rate
   - Main effects on bargaining within marriage
Response of Divorce Rate to Divorce Law Reforms
Sensitivity to Different Coding of Family Law Regime
Regression results controlling for state and year fixed effects

Regression coefficients: Effect on divorce
(Friedberg (1998)
Gruber (2000)
Johnson and Mazingo (2000)
Ellman and Lohr (1998a)
Ellman and Lohr (1998b)
Brinig and Buckley (1998)
Nakonezny Rodgers and Shull (1995)

Divorce Laws as coded by:
- Friedberg (1998)
- Gruber (2000)
- Johnson and Mazingo (2000)
- Ellman and Lohr (1998a)
- Ellman and Lohr (1998b)
- Brinig and Buckley (1998)
- Nakonezny Rodgers and Shull (1995)

Years since (until) adoption of Unilateral or No-Fault Divorce Laws

Regression coefficients: Effect on divorce (Annual divorces per thousand people)
Effect of Unilateral Divorce on Female Suicide

Regression Coefficients:
% Change in Suicide Rate

Coefficient estimates

+1 robust standard error

-1 robust standard error

Years since (to) Unilateral divorce introduced

(1-2) 3-4 5-6 7-8 9-10 11-12 13-14 15-16 17-18 >=19
Empirical Robustness

• Statistical power is the main issue

⇒ Explore in four main directions:
  – Intra-Occular Impact Test (Look at the data)
  – Measuring *divorce risk*
    • Stocks or flows?
    • Reduce measurement error
    • Interpretation of *unilateral divorce laws*
  – Increase *N*
    • CPS has 21 regions
    • Census and administrative data have 51 states
  – Increase *T*
    • Start at 1948, end 1998 (CPS starts 1964)
Measures of "Divorce Risk"

- **Vital Statistics:**
  - All new divorces (LHS)

- **CPS:** %Divorced (RHS)

- **Census:** %Divorced (RHS)

Year:
- 1950
- 1952
- 1954
- 1956
- 1958
- 1960
- 1962
- 1964
- 1966
- 1968
- 1970
- 1972
- 1974
- 1976
- 1978
- 1980
- 1982
- 1984
- 1986
- 1988
- 1990
- 1992
- 1994
- 1996
- 1998
- 2000

Annual new divorces per thousand people:
- 0
- 2
- 4
- 6
- 8
- 10
- 12

% of population currently divorced:
- 0%
- 2%
- 4%
- 6%
- 8%
- 10%
- 12%
Could this be true?

- Show long-run evolution of the divorce rate
- What does this say about the evolution of the political gender gap?
Explaining the Political Gender Gap

From 1964-96:

• Political gender gap increased 13.4%;
• Divorcees rose from 3% to 10% of the population
• Coefficient on female*pdivorce: 1.8 (se=0.9)
• Point estimate: political gender gap rose $1.8\times(0.10-0.03)=12.6\%$
• 95% confidence interval: 0% to 25%
## Sensitivity Testing

<table>
<thead>
<tr>
<th>Definition of divorce risk</th>
<th>Source</th>
<th>$n$</th>
<th>$T$</th>
<th>Coefficient</th>
<th>Explains</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock of divorcees</td>
<td>CPS</td>
<td>21 CPS-state groupings</td>
<td>1964-96</td>
<td>1.802</td>
<td>-0.921</td>
</tr>
<tr>
<td>Stock of divorcees</td>
<td></td>
<td></td>
<td>1964-96</td>
<td>1.66</td>
<td>-0.953</td>
</tr>
<tr>
<td>Stock of divorcees</td>
<td>Census (in 21 CPS-state groupings)</td>
<td></td>
<td>1964-96</td>
<td>1.28</td>
<td>-1.501</td>
</tr>
<tr>
<td>Stock of divorcees</td>
<td>Census (in 51 states)</td>
<td></td>
<td>1964-96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stock of divorcees</td>
<td></td>
<td></td>
<td>1952-98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rate of divorce</td>
<td>Vital Statistics</td>
<td>51 states</td>
<td>1964-96</td>
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<td>Rate of divorce</td>
<td>Vital Statistics</td>
<td>21 CPS-state groupings</td>
<td>1964-98</td>
<td>0.0147</td>
<td>-0.0177</td>
</tr>
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Replication

Evolution of the Political Gender Gap

% Female identifying with Dems - % Male identifying with Dems (Change since 1964)

Including rich set of controls
(marital status, race, age, cohort, religion, education, family income)

Add controls for "divorce risk"

Election Year

Limitations of the CPS

- Available only since 1964
  - Election data extends back to 1948
- Not unique state codings
  - Only 21 CPS state-groupings identified
- Small samples $\Rightarrow$ Measurement error
- Backward-looking measure of divorce risk
## Empirical Sensitivity

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>CPS - L Replication Census</th>
<th>Vital Stats</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Edlund-Pande Sample</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>1.8</td>
<td>(0.9)</td>
<td>0.82 (1.97)</td>
</tr>
<tr>
<td>51</td>
<td>n.a.</td>
<td>n.a.</td>
<td>-1.0 (1.8)</td>
</tr>
<tr>
<td>All available data</td>
<td>21</td>
<td>2.1 (1.0)</td>
<td>2.5 (1.5)</td>
</tr>
<tr>
<td>51</td>
<td>n.a.</td>
<td>n.a.</td>
<td>0.8 (0.4)</td>
</tr>
</tbody>
</table>

**Note:**
- **n.a.** indicates not applicable.
- **1.8** indicates a value of 1.8 with a standard error of 0.9.
- **1.7** indicates a value of 1.7 with a standard error of 1.0.
- **1.3** indicates a value of 1.3 with a standard error of 1.5.
- **1.5** indicates a value of 1.5 with a standard error of 1.8.
- **0.5** indicates a value of 0.5 with a standard error of 0.6.
- **2.1** indicates a value of 2.1 with a standard error of 1.0.
- **2.5** indicates a value of 2.5 with a standard error of 1.5.

**Year Range:**
- 1948-1998
- 1956-98

**Additional Notes:**
- Values marked with **are considered significant.**
- Values marked with * are considered as trend.
Summary

• Marries political and family economics nicely
• Theory: Models taking within-household distribution seriously yield different results
• Empirically: Statistical power is a big issue
• Results are sensitive to specification of “divorce risk”
Interpretation

- Authors show that women shift left following divorce
- But is divorce the intervening variable?
Political Gender Gaps Opening Up in Europe

Survey Year (Eurobarometer)

Political Gender Gaps Opening Up in Europe
Rising Divorce Rates Across Europe
Sensitivity: Different definitions of “Divorce Risk”