Marriage, Markets and Money: A Coasian Theory of Household Formation

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Paper

- **Theory**: Dynamic GE model linking goods and marriage markets

- **Micro Evidence**: Being single is cash intensive

- **Macro Evidence**: Increased expected inflation causes marriage rates to rise
**Theory: Dynamic GE in 3 Markets**

**Staples**
- Low cash holding demand
- Marginal utility and surplus unaffected by marriage
- Labor supplied

**Entertainment**
- High cash holding demand
- Marginal utility and surplus higher when single

**Marriage**
- If married
  - Utility: \( z \)
  - Divorce: \( \delta \)
- If single
  - Meet: prob \( \lambda \)
  - Draw: \( z \)
  - Marry: if \( z > R \)

Discussion: Marriage, Markets and Money
Theory of the Firm Household

- Utility from companionship (utility synergies)
- In house production to avoid market transaction costs (e.g., inflation taxes on holding cash)
- Economies of scale (share public goods)
- Risk sharing (why can’t insurance markets provide this? moral hazard, asymmetric information)
- Avoid contract incompleteness in joint production (children) …marital contract reduces ex-post holdup (e.g. sacrificing outside options to invest in children).
Paper

- **Theory**: Dynamic GE model linking goods and marriage markets

- **Micro Evidence**: Being single is cash intensive

- **Macro Evidence**: Increased expected inflation causes marriage rates to rise
Micro Evidence: Australian Data

- Simon et al 2010 (J Banking Finance)
  - Australian 2007 Survey Payments Data
  - 662 Individuals for 2 weeks – all are credit card holders

<table>
<thead>
<tr>
<th>Merchant Category</th>
<th>Cash</th>
<th>Credit Card</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take-away Food</td>
<td>94%</td>
<td>3%</td>
</tr>
<tr>
<td>Pub/Bar</td>
<td>90%</td>
<td>6%</td>
</tr>
<tr>
<td>Restaurant</td>
<td>71%</td>
<td>22%</td>
</tr>
<tr>
<td>Supermarket</td>
<td>48%</td>
<td>26%</td>
</tr>
<tr>
<td>Health/Medical Care</td>
<td>40%</td>
<td>39%</td>
</tr>
<tr>
<td>Petrol</td>
<td>31%</td>
<td>36%</td>
</tr>
<tr>
<td>Housing/Utilities</td>
<td>21%</td>
<td>30%</td>
</tr>
</tbody>
</table>
**Micro Evidence: Magnitudes**

- Bank of Canada 2009 Methods of Payments Survey
- Table 7: Unmarried woman - $40 extra wallet cash
- HP filtered Canadian inflation: between 1% and 10%
- Cost of $40 (real $) extra working capital while single

\[
40 \left( \frac{r + \pi}{r + \lambda (1 + \pi)} \right)
\]

<table>
<thead>
<tr>
<th>Inflation</th>
<th>PV Cost of $40 WC</th>
</tr>
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<tbody>
<tr>
<td>1%</td>
<td>$9.92</td>
</tr>
<tr>
<td>10%</td>
<td>$36.92</td>
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</tbody>
</table>

- Assumes: \( r = 2\% \), \( \lambda = 10\% \), \( \delta = 0 \)
- Extra annual cost of being single in high inflation: $27

Discussion: Marriage, Markets and Money
Micro Evidence: Magnitudes

- Ignores demand deposits and other cash holdings
- How big do these need to be to alter marriage decision?

Buckles Guldi Price 2011 (J Human Resources)
- Staggered repeal of marriage blood test requirement in 34 US states 1980-2008
- Laboratory for gauging effect of small costs on marriage decision
  - 3-5 day wait for results plus time taken to make appointment
  - Examples test costs (2005): Washington D.C $40, Mississippi: $26
  - Disutility of taking a blood test
Diff in Diff: BTR repeal increase licenses issued by 0.53 per 1000 state residents (6.1% increase in flow rate)

- Controls include state and year fixed effects
- Third explained by obtaining license in another state
Micro Evidence: US Scanner Data

- Klee 2008: Scanner data from *grocery store* transactions for 99 retail outlets for 3 months in 2001
  - 10 million transactions
  - Census-tract data: demographic info on area of retail outlet

- Being in a census tract with more married people decreases the probability that cash is used to pay for a transaction
  - Persists after controlling for # items, value of sale, age etc

- Theory: being single causes you to use cash intensive markets more often
  - But this is the *same market* with *same payment options*
Micro Evidence: US Scanner Data

- Klee 2008 suggests that singles are more likely to choose cash for the *same transaction*

- Why?
- Economies of scale? No: controls for # items, value
- Could HH status alter incentives for choice of payment?
- Individual heterogeneity seems to be important
  - FDIC 2012: in 2011 8.2% of US households were unbanked
  - Being unbanked could cause payment choice and marriage
- Difficult to measure effect of being married by comparing across married and single people
Paper

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Discussion: Marriage, Markets and Money
Macro Evidence

- Regressions of: Marriage rate on inflation and controls

- Concern: is inflation proxying for other factors that affect marriage?

- Higher inflation might proxy for *economic uncertainty* and thus the demand for marital risk sharing

- **Political changes** might alter: child support, social security as well as inflation