Empirical Analysis of Contract Theory Workshop
Child Adoption in the United States and Japan
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Towards the Economic Analysis of Child Adoption

I. Child Adoption in the U.S. (Bernal, Hu, Moriguchi, and Nagypal (2007))
   • Institutional background
   • Historical trends
   • Demand & supply analysis using micro data
   • Model and policy experiments

II. Child Adoption in Japan
   • Adoption laws in Japan
   • Recent trends
   • Comparative remarks

Why Study Adoption?
• Quantitative Importance
  – 2.5% of all children in the U.S. are adopted.
  – More than 20,000 foreign children are adopted by U.S. citizens each year.
  – The U.S. adopts more children per capita than any other countries.
  – Unmet demand for adoption in the U.S. is even higher.

• Economic Significance
  – Recent development in the economics of fertility decisions.
  – Child adoption as an alternative to child bearing with different time, monetary, and psychic costs and benefits.
  – Relocation of children across parents with important welfare implications.
  – "Adoption market" differs greatly from standard markets.

U.S. Adoption Market: Institutional Background
• Adoption Types
  – Formal adoption (legally approved by state court),
  – Related adoption (by relative or stepparents) vs. Unrelated adoption,
  – International adoption (foreign children adopted by U.S. citizens),
  – Special needs adoption (children with disabilities, of ethnic minority, or higher age).

• Adoption Agencies
  – Private agency (NPOs; pro-profit agencies in some states; 2-4 year waiting period; adoption costs $20K-30K; matching criteria),
  – Public agency (placement of foster care children; majority with special needs; state subsidies; adoption costs $0-2K).

• New Trends
  – Blended family with biological and non-biological children,
  – Adoption by single women and gay couples.

Motivations vary greatly by adoption types.

Brief History of Adoption in the U.S., 1850-2000
1. Initial Stage (1850-1910)
   – Massachusetts adoption law in 1851, most states followed by 1910.
   – Charitable organizations tried to find home for orphans and abandoned children.
   – But adoptions remained few (and mostly informal).
   – Excess supply in adoption market.

2. Second Stage (1910-1993)
   – Advancement in infant formula enabled adoption of babies.
   – Growing perception that nurture (not nature) matters.
   – Increasing demand for healthy infants, stricter regulations.
   – Children with disabilities considered "unadoptable".
   – Large number of WWII orphans prompted international adoption.

   – Supply of domestic infants began to decline, leading to excess demand.
   – Special visa categories for international adoption in 1993.
   – States encouraged special needs adoption since 1993.

Historical Trends: Total Number of Formal Adoption in the U.S., 1944-2002
Historical Trends: Adoption per 1,000 Live Births in the U.S., 1944-2002

Historical Trends: Number of Adoption by Adoption Types, 1951-2002

Historical Trends: International Adoption in the U.S., 1945-2006

Source Countries for International Adoption, 1990-2006

Historical Trends: Number of Adoption by Adoption Types, 1951-2002

Historical Trends: Unrelated Adoption by Public Agency in the U.S., 1951-2004

Since 1990, over 70% of public agency placements are special needs children. They include both unrelated and related adoptions.
Historical Trends in the U.S.: Discussion

- Adoption rate in the U.S. increased sharply in the 1960s.
  - Increased in demand, or supply?
  - TFP declined sharply in the 1960s.
- It reached the historic peak of 47 per 1,000 births in 1968-73, and then declined in the 1970s and 1980s due mainly to the fall in unrelated adoption.
  - Decline in supply: (1) abortion legalization circa 1970 (Biller & Zavodny (2002)), (2) diffusion of contraceptive pills, and (3) decline in stigma attached to single mothers.
- Recently, adoption rate may be increasing due to the rise in adoption.
  - Increase in the supply of adoptable foreign children since 1990.
  - Increase in women's opportunity cost since 1970.
  - Decline in the social stigma over time.
  - Social stigma attached to single motherhood
  - Not wanting any child
  - Opportunity cost of rearing a child
  - Inability to bear a child
  - Humanitarian motives
  - Advance in IVF technology since 1980,
  - Variation in children's needs for adoptive homes across types,
  - Variation in adoption cost across types.
  - Variation in the social stigma across race & location,
  - Decline in the social stigma over time,
  - Increase in women's opportunity cost since 1970,
  - Social stigma attached to single mothers.
  - But constrained by resource availability.

Demand: Why Do People Adopt Unrelated Children?

- Explanations
  1. Opportunity cost of bearing a child
     - Proxy: education, occupation, work experience.
  2. Inability to bear a child
     - Proxy: reproductive health, presence of biological child.
  3. Humanitarian motives
     - Proxy: religious affiliation, charitable donation.

Supply: Why Do People Relinquish Children for Adoption?

- Explanations
  1. Opportunity cost of rearing a child
     - Proxy: education, occupation, work status.
  2. Not wanting any child
     - Proxy: desired number of children, completed family size.
  3. Social stigma attached to single motherhood
     - Proxy: marital status, religion.
  4. Lack of resource to rear a child
     - Proxy: wealth, woman's father's income.

Determinants of Adoption Demand: Preliminary Analysis

<table>
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<tr>
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<th>Coefficient</th>
<th>Standard Error</th>
<th>z Statistic</th>
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Adoption Laws in Japan

- Ordinary Adoption (since Taiho Ritsuryo in 701; Civil Code in 1896, 1947)
  - Adoptive must be younger than adopter (can be any age).
  - Adopter must be over 20 (can be married or unmarried).
  - Parental tie with biological parents remains after adoption.
  - Must be approved by family court when adopting a minor under 18 except for adopting stepchild or grandchild.
- Special Adoption (since the Revised Civil Code in 1987)
  - Adoptive must be under 8.
  - Adoptive parents must be a married couple over 20.
  - Adoptive must be cared for by adoptive parents for at least 6 months.
  - Permanent transfer of parental rights and duties from biological to adoptive parents.
  - All special adoption must be approved by family court.
Adoption Trends in Japan:
Child Adoption Cases Filed, 1986-2004

Adoption Trends in Japan:
Adoption Cases per 1,000 Births, 1986-2004

Comparing Data in Japan and the U.S.

<table>
<thead>
<tr>
<th></th>
<th>Japan</th>
<th>U.S.</th>
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</thead>
<tbody>
<tr>
<td>Adoption Rate (per 1,000 births)</td>
<td>1.6</td>
<td>31.4</td>
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<tr>
<td>% Children Born Out-of-Wedlock</td>
<td>1.6%</td>
<td>33.1%</td>
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<tr>
<td>Abortion Rate (per 1,000 births)</td>
<td>287</td>
<td>324</td>
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<tr>
<td>Total Fertility Rate</td>
<td>1.36</td>
<td>2.06</td>
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<tr>
<td>Age at First Marriage</td>
<td>27.0</td>
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<tr>
<td>Age at First Birth</td>
<td>26.0</td>
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<tr>
<td>Female Labor Participation Rate</td>
<td>40.3%</td>
<td>80.2%</td>
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</tbody>
</table>

All data are in 2000.

Adoption Market in Japan

- Demand
  - Unrelated adoption: mostly by childless couples with strong preference for healthy infants.
  - Inter-racial adoption extremely rare.
  - Related adoption: increase in stepparent adoption?
  - High demand from foreign couples in/outside Japan.

- Supply
  - Largely unmarried mothers relinquishing their children at birth due to (a) persistent stigma attached to single mothers and (b) lack of public assistance,
  - Only small fraction of children in infant’s home (3,000), children’s homes (30,000), and foster care (2,500) are placed for adoption.
  - Children in special needs institutions (30,000+) are still considered “unadoptable” in Japan.

- Short waiting period (3-12 months) & nominal adoption fee.

Concluding Remarks

- The rate of child adoption in Japan is extremely low compared to the U.S. (even after controlling for demographic characteristics).
- The market for infant adoption in Japan is characterized by excess supply, while the U.S. market is characterized by excess demand.
- The difference might be explained by cultural or historical differences, but needs further investigation.
  - Adoption rates in the U.K., Canada, and Australia are much lower than in the U.S.
  - Adoption rates are relatively high in Norway, Sweden, and France.
  - In Korea, the law does not allow unrelated adoption.
  - Under the Islamic law, no adoption is allowed.