

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

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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.

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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.

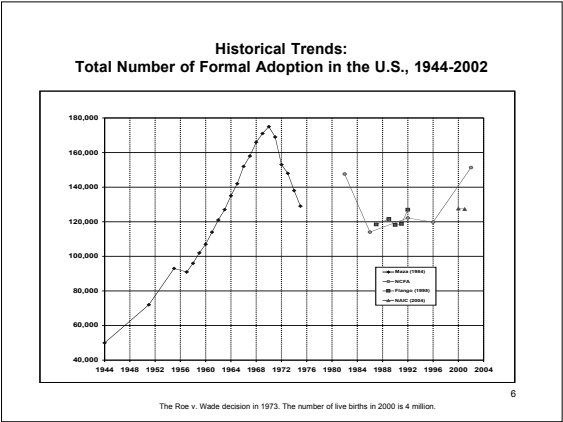
➔ Motivations vary greatly by adoption types.

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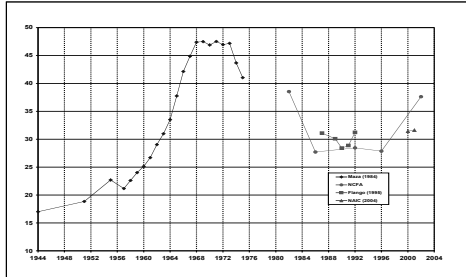
Brief History of Adoption in the U.S., 1850-2000

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 (1910-1960)
 - 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.
3. Recent Stage (1960-2000)
 - Supply of domestic infants began to decline, leading to excess demand.
 - Special visa categories for international adoption in 1963.
 - States encouraged special needs adoption since 1980.

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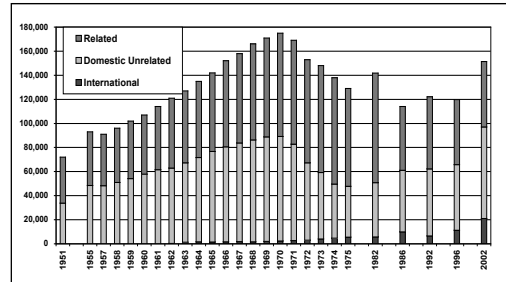


**Historical Trends:
Adoption per 1,000 Live Births in the U.S., 1944-2002**



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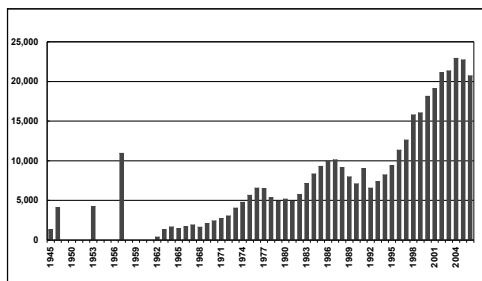
**Historical Trends:
Number of Adoption by Adoption Types, 1951-2002**



Related adoption includes adoptions by stepparents and relatives.

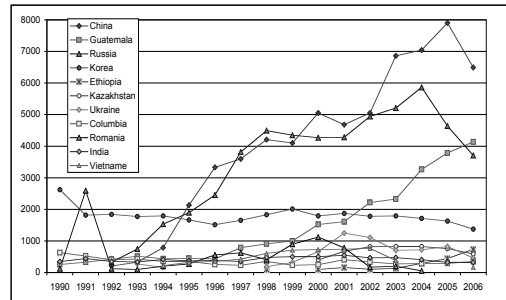
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**Historical Trends:
International Adoption in the U.S., 1945-2006**



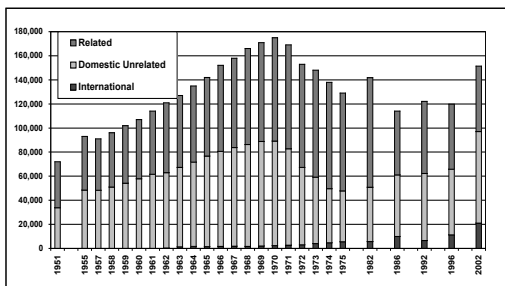
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Source Countries for International Adoption, 1990-2006



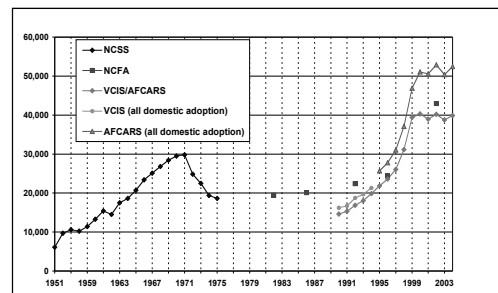
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**Historical Trends:
Number of Adoption by Adoption Types, 1951-2002**



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**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 adoption.

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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 (Bitter & 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 international adoption and special needs adoption.
 - Increase in the supply of adoptable foreign children since 1990.
 - State subsidy for adopting foster care children since 1990.
 - But, demand may be falling due to progress in infertility treatment.

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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.
 But constrained by *resource availability*
Proxy: income, marital status.
- ◆ Variation across time and adoption types:
 - Increase in women's opportunity cost since 1970.
 - Advancement in IVF technology since 1980.
 - Variation in children's needs for adoptive homes across types.
 - Variation in adoption cost across types.

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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.
- ◆ Variation across time and groups:
 - Increase in women's opportunity cost since 1970.
 - Decline in the social stigma over time.
 - Variation in the social stigma across race & location.
 - Change in welfare benefits for single mothers over time.

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Microdata: NSFG and SIPP

- ◆ National Survey of Family Growth (NSFG)
 - 6 cycles (1973, 1976, 1982, 1995, 2002).
 - National sample of 10,000 women between age 15-44.
 - Data on marital and fertility history, reproductive health.
 - Child relinquishment (adoption supply).
 - Potential and fulfilled child adoption (adoption demand).
 - Can identify unrelated and international adoptions.
- ◆ Survey of Income and Program Participation (SIPP)
 - 13 short panels, 1984-2004.
 - National sample of 40,000 households.
 - More information on wealth, labor market status, welfare.
 - Can identify unrelated, stepparent, and foster care adoptions.

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Determinants of Adoption Demand: Preliminary Analysis

Logit for the Propensity to Adopt (1995 and 2002 NSFG Data)
(Marginal Effects - Calculated on Mean Values)

	odds ratio	ci
Sample mean Pr (adopt=1)	0.80%	
(Nonwhite)	-0.13%	*
No. Children in Household	0.07%	**
(Foster Mother)	8.39%	**
(Infertile)	1.79%	**
(Married)	0.26%	**
(Divorced)	0.26%	**
(Working Full-time)	0.03%	
(Unemployed)	0.00%	
(Protestant)	-0.09%	
(Catholic)	-0.05%	
(Miscarriage)	0.07%	
(Abortion)	-0.17%	**
Importance of Religion: (not=0, some=1, very=2)	0.12%	**
Income: (by bracket \$10,000)	0.09%	**
Years of Education	0.03%	**
Max Likelihood Function	-691.71	
No. of Observations	18,459	

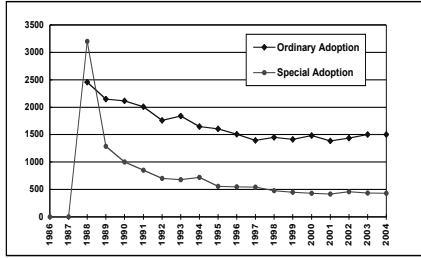
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Adoption Laws in Japan

- ◆ Ordinary Adoption (since Taiho Ritsuryo in 701; Civil Code in 1896, 1947)
 - Adoptee 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)
 - Adoptee must be under 6.
 - Adoptive parents must be a married couple over 20.
 - Adoptee 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.

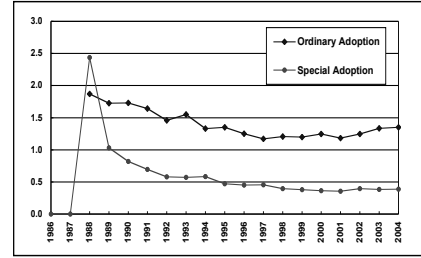
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**Adoption Trends in Japan:
Child Adoption Cases Filed, 1986-2004**



Sources: Hayes and Habu (2006), Appendix 1. The number of live births in Japan in 2000 is 1 million.

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



Stepparent adoption are not included as it does not require court sanction. Approximately 70% of cases are approved.

Comparing Data in Japan and the U.S.

	Japan	U.S.
Adoption Rate (per 1,000 births)	1.6	31.4
% Children Born Out-of-Wedlock	1.6%	33.1%
Abortion Rate (per 1,000 births)	287	324
Total Fertility Rate	1.36	2.06
Age at First Marriage	27.0	25.1
Age at First Birth	28.0	27.3
Female Labor Participation Rate	49.3%	60.2%

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.