

Child Welfare and Child Outcomes: Measuring the Effects of Foster Care

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Florida Task Force for Child Protection
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www.mit.edu/~jjdoyle/research.html

Goals Today:

- Describe my research: effects of foster care on long-term outcomes for children
 - New Research Separating Causation from Correlation
 - Interpretation can be subtle
- Consider “The Big Questions” in child welfare
 - Child welfare literature
 - Your thoughts

Plan of Talk

- Big Questions in Child Welfare
- Why Answers Are So Important
- Why The Questions Are Difficult to Answer
- My Research
 - Effects of Foster Care Placement on Child Outcomes
 - Effects of Changes in Kinship Foster Care
- Conclusions & Going Forward

Big Questions in Child Welfare

1. What Are the Effects of Foster Care Placement on Child Wellbeing?

Foster Care Placement: Difficult Decision

- What Types of Cases Benefit from Placement?
- What Types of Cases Show Harm from Placement?

Big Questions in Child Welfare

2. What Types of Placements Are Best? Relatives/Non-Relatives/Institutions

As before:

What Types of Cases Benefit from Particular
Placement Types?

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Child Welfare Affects Large Numbers of Children

- >2 Million Investigations in the U.S. each year
- Nearly 1 Million Found Abused/Neglected
- >500,000 currently in Foster Care
- \$20 Billion spent on Child Protection each year

Child Welfare Affects Particularly At-Risk Children

- Maltreated Children: 4 times higher childhood mortality
1400 deaths/year attributed to abuse or neglect
- Former Foster Children:
 - 28% of the Homeless Population
 - 20% of Prison Inmates in US (under the age of 30)
 - 25% of Prison Inmates w/ Prior Convictions
 - Children who are still in foster care at 17:
 - 2/3 of boys and 1/2 of girls have been arrested.
 - 3 times more likely to have sexually transmitted disease
 - 4 times more likely to have mental illness

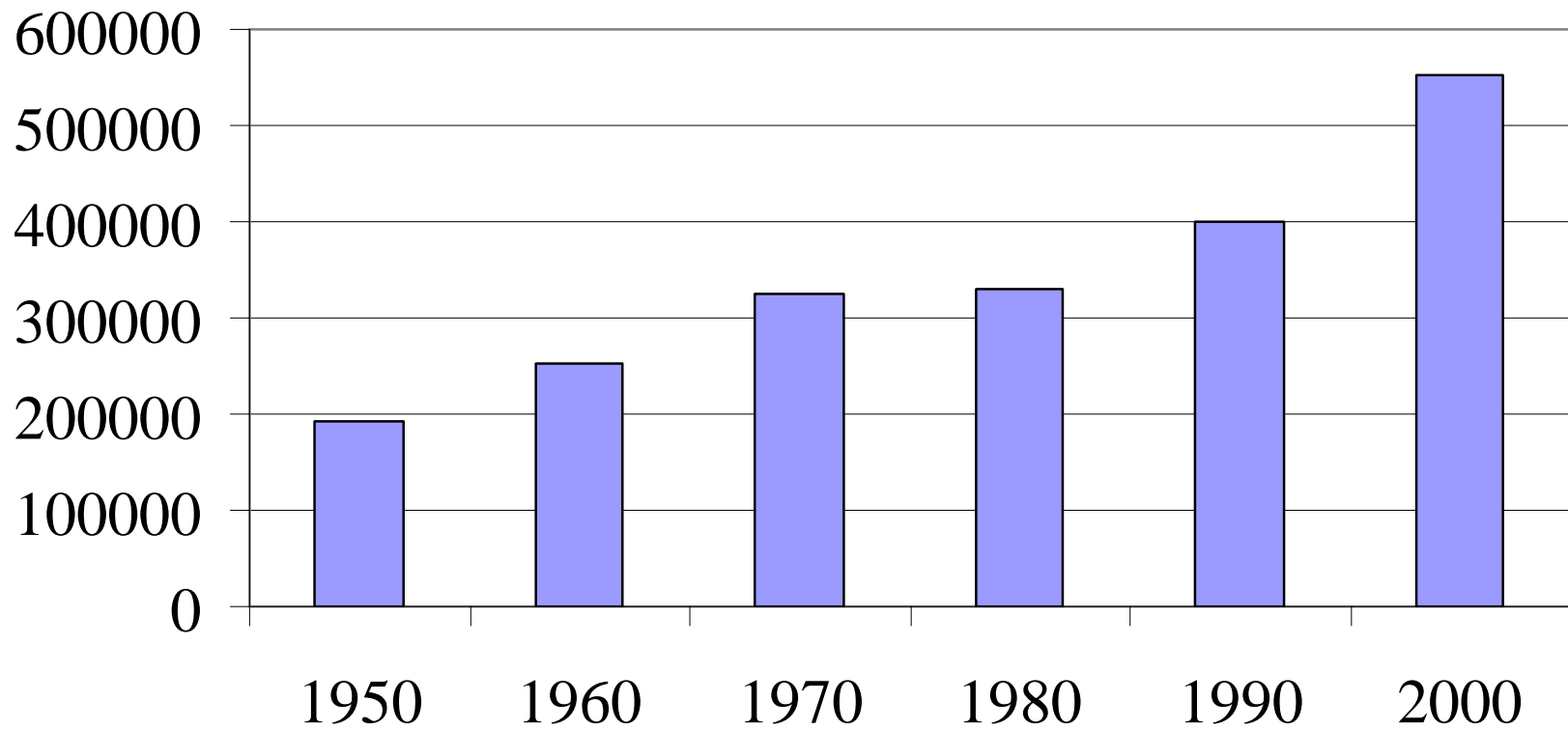
Competing Goods

Child Protection

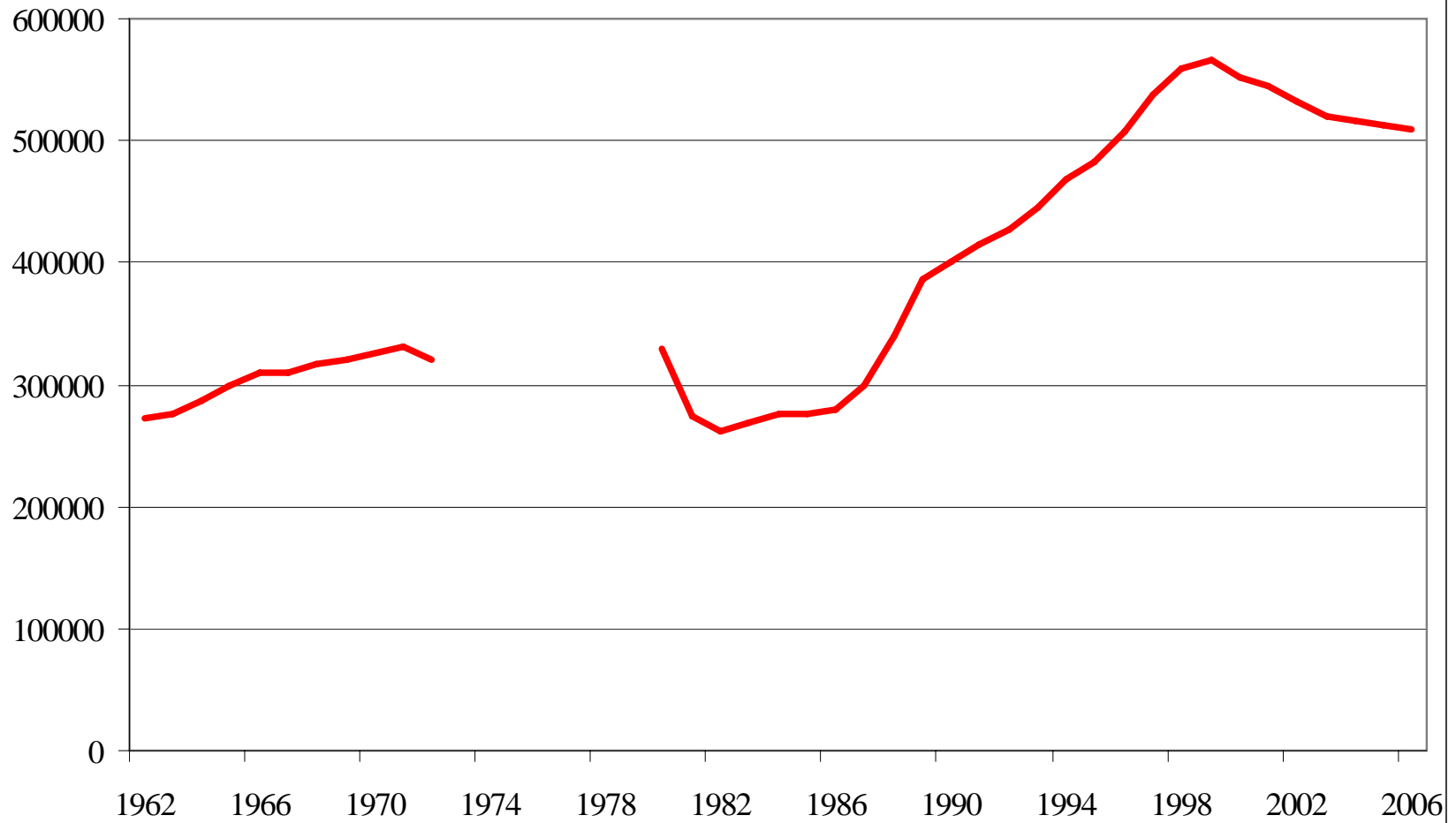
Family Preservation

- Aggressive Protection → More Placements
 - More Type I Errors (False Positive)
 - Fewer Type II Errors (False Negative)
- Incentives
 - Public Attention on Type II Errors: Failure to remove a child who is later found to be abused

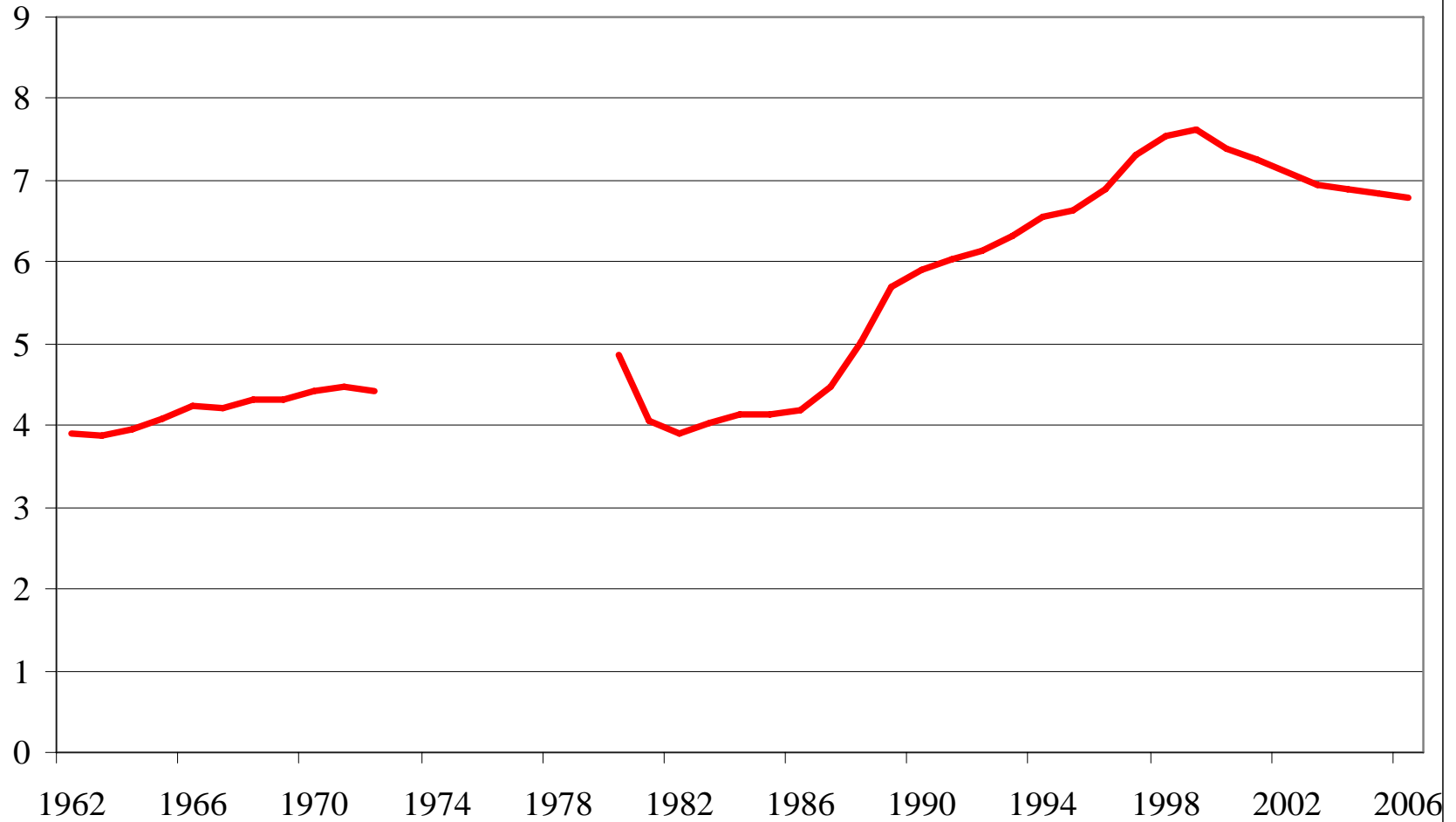
Number of Children in Out-of-Home Care: 1950-2000



Number of Children in Foster Care in the U.S. 1962-2006



Children in Foster Care Per 1000 Population in the U.S. 1962-2006



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Estimation Issues

To Answer The Questions, We Want to Estimate:

Change in (Average) Outcomes For Children Placed in Foster Care

Compared to:

What Would have Happened if They Remained at Home

Example: Homelessness (H):

$$E(H|Foster\ Care = 1) - E(H|Foster\ Care = 0)$$

Problem: Don't Observe "What Would Have Happened"

Usual Solution: Randomized Trial (ethical concerns)

Estimation Issues

- Previous Studies: Correlations
Confounding Factors
 - Ex: High Homelessness Rate: May be Due to Abusive Family Background
 - Key Question: What Would the Likelihood of Homelessness be if the child had not been in Foster Care?
- Another Estimation Problem: Lack of Data

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My Research

- Attempt to Go Beyond Correlations and get to Causation
- Ideas Involve “Natural Experiments” that mimic a randomized trial
- Interpretation: Results Apply to Cases “Affected by the Natural Experiment”

Child Protection and Child Outcomes: Measuring the Effects of Foster Care

Introduction

What are the Effects of Foster Care Placement on Long-Term Outcomes:

– Lack of Data

– Estimation Issues

Children Placed are Selected: not randomly assigned

- Children Placed Come from Troubled Families
- Children Placed are Those Most Likely to Benefit

Background: Previous Evidence

- Most Studies Compare FC with All Children
 - More likely to be in Prison, Homeless, Suffer Mental Abuse
 - Courtney et al. (2004): 2/3 of foster children who “age out” are arrested.
- 3 studies compare investigated children
 - Runyan and Gould (1985): N=220, Little Difference in Delinquency
 - Davidson-Arad et al. (2003): N=92, Interviews 6 months after investigation & removed children have better quality of life indicators.
 - Jonson-Reid and Barth (2000): N=160,000, Children who received in-home services showed less delinquency than those who were removed or who did not receive in-home services.

My Research: Data

- Chapin Hall Center for Children (U of Chicago)
- Illinois Administrative Data Linked across Programs:
 - Abuse Investigations Data Matched to:
 - Juvenile Delinquency Court Records
 - Teen Motherhood in Medicaid
 - Employment in Unemployment Insurance Records
 - Adult Arrests/Convictions/Prison from Illinois State Police
 - & More...

ILLINOIS DATA SOURCES

Department of Children & Family Services:

July 1, 1990-June 30, 2001

-Child Age, Race, Sex, Address

-Initial Reporter

-Allegation

-Perpetrator (Parent, Step-Parent, Cohabiting Adult)

-Foster Care Entry (recorded through 2003)

Medicaid
1990-2003

Department of
Employment Security
Employment & Earnings
2002

Juvenile Court
Of Cook County
1990-2000

Illinois State Police
Arrests/Imprisonment
2000-2005

Table 1: Summary Statistics

Variable	Outside Cook County		Cook County		
	Mean	Std Dev	Mean	Std Dev	
	Foster Care Placement	0.16	0.36	0.26	0.44
Race	white	0.71	0.46	0.12	0.32
	African American	0.25	0.43	0.76	0.43
	Hispanic	0.03	0.18	0.11	0.31
Initial Reporter	physician	0.07	0.25	0.13	0.34
	school	0.17	0.38	0.13	0.33
	police	0.21	0.41	0.14	0.35
	family	0.18	0.38	0.27	0.45
Age at Report	age	11.0	3.1	11.0	3.0
Sex	boy	0.50	0.50	0.49	0.50
Allegation	lack of supervision	0.26	0.44	0.35	0.48
	environmental neglect	0.11	0.31	0.15	0.36
	substantial risk of harm	0.35	0.48	0.24	0.43
	physical abuse	0.20	0.40	0.17	0.38
	Observations	23254		21653	

Children investigated between July 1, 1990 and June 30, 2003 and were at least 18 in 2005.
Cook County includes the City of Chicago.

My Research: Main Idea

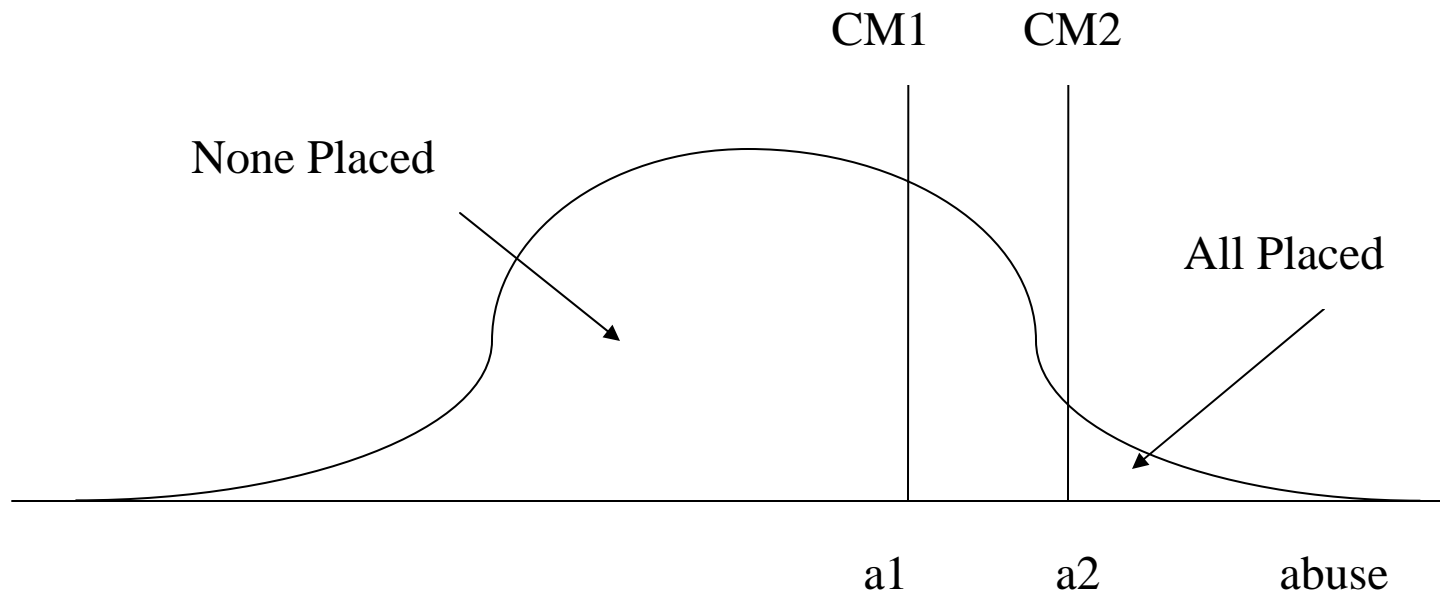
Consider Child Protection Investigators

- Most Families Are Effectively Randomized Families to Investigators
- Investigators Affect Removal
- Estimates of Interest:

Children “Affected by the Natural Experiment”:

**Cases When Investigators May Disagree
about a Placement Recommendation**

Figure 1: Abuse Thresholds for Removal



CM1: Remove if $a > a1$; CM2: Remove if $a > a2$

Background

- All Investigations begin with State Central Register
- Case Assigned to a Field Team (County-level)
- Assigned to one of ~8 Investigators
- Decision 1: Determine if case has merit
- Decision 2: Emergency Removal
- Decision 3: Present Evidence to Judge for Longer Term Removal

Investigator Rotational Assignment

Exceptions

- Initial investigator
reassigned for any future
investigations
- Neighborhood Assignment
- Spanish-Speaking Cases

- Special Investigations
Sexual Abuse

Data Restrictions

- Investigator in First
Investigation

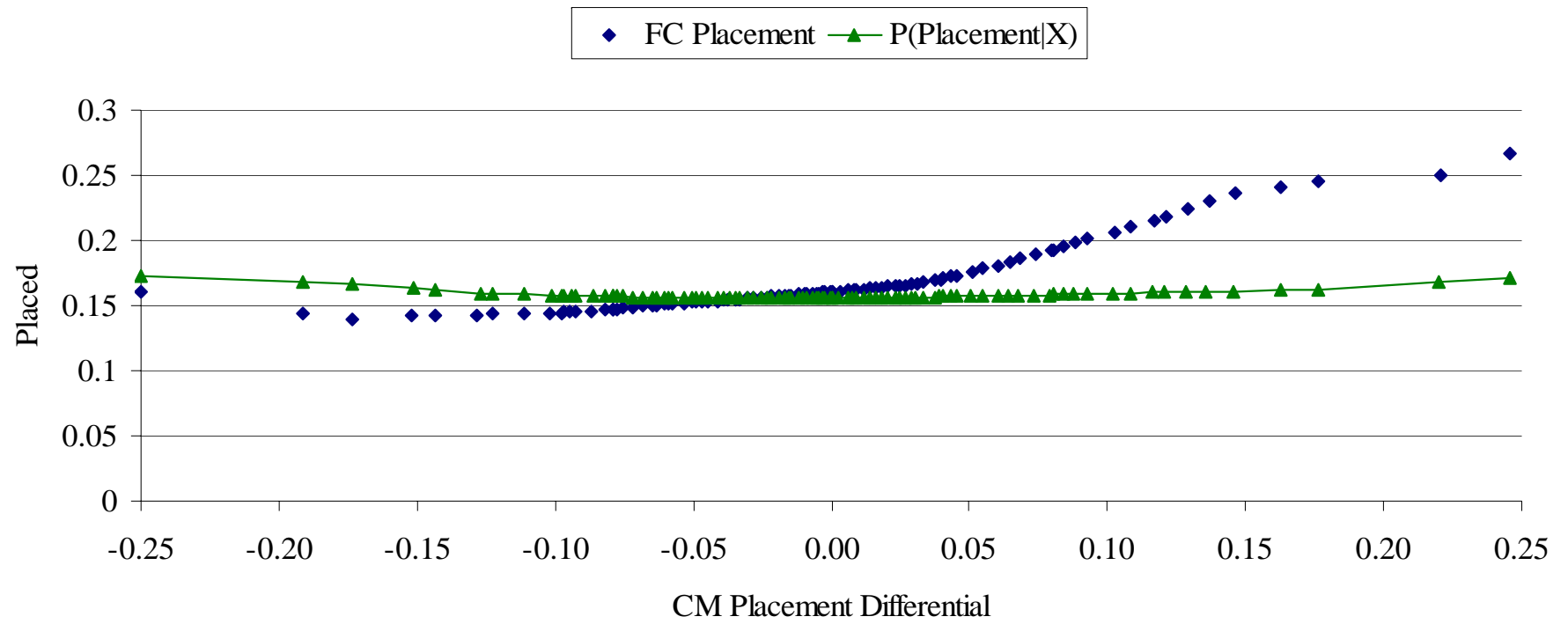
- Sub-team cells defined by:
TEAM x
ZIP x HISPANIC x YEAR

- Dropped from Analysis

Separating Causation from Correlation

- Key Variable: How “Strict” is the Investigator?
- Economics Jargon: “Instrumental Variable”, Z
- Here, Z = Case Manager Placement Differential:
In cases other than a particular family’s case, what fraction of children investigated by that family’s case manager are placed, relative to placement rates of other investigators on the same team in a given year

Figure A1A: FC Placement & Predicted FC Placement vs. CM Removal Differential:
Outside Cook County



Interpretation

Investigator Type vs. Foster Care Placement

Investigators:

- do not supervise child once in foster care
- are not associated with observable characteristics
- focus on gathering facts for foster care placement recommendation

Figure 1A: FC Placement & Arrest Rate vs. CM Placement Differential:
Outside Cook County

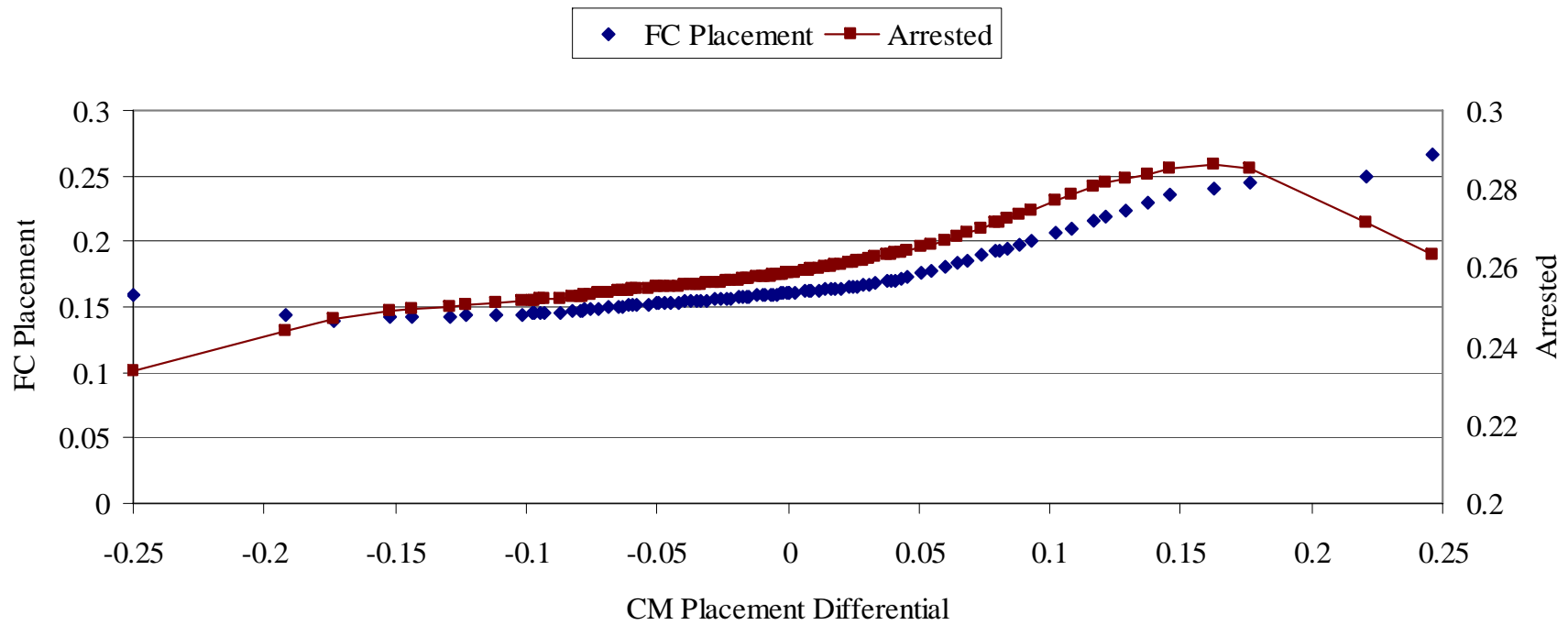


Figure 2A: Arrested vs. P(Placement|Z):
Outside Cook County

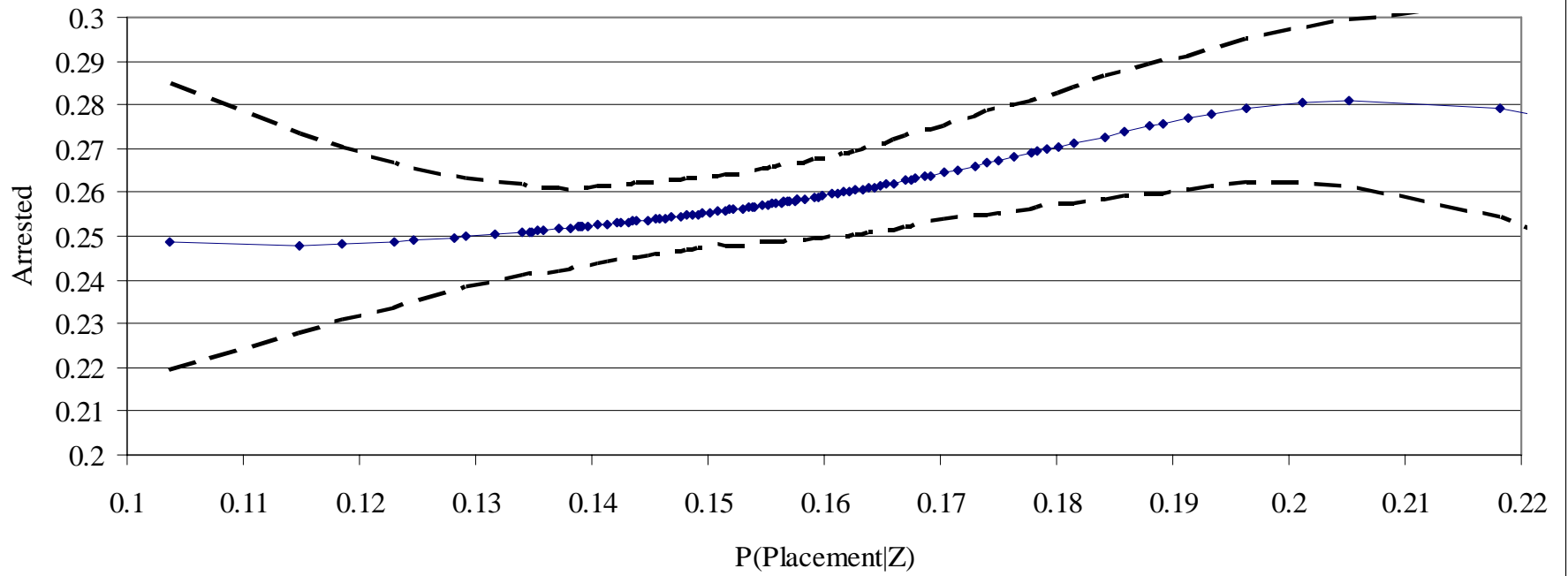


Figure 3A: Delinquency as a function of $P(z)$

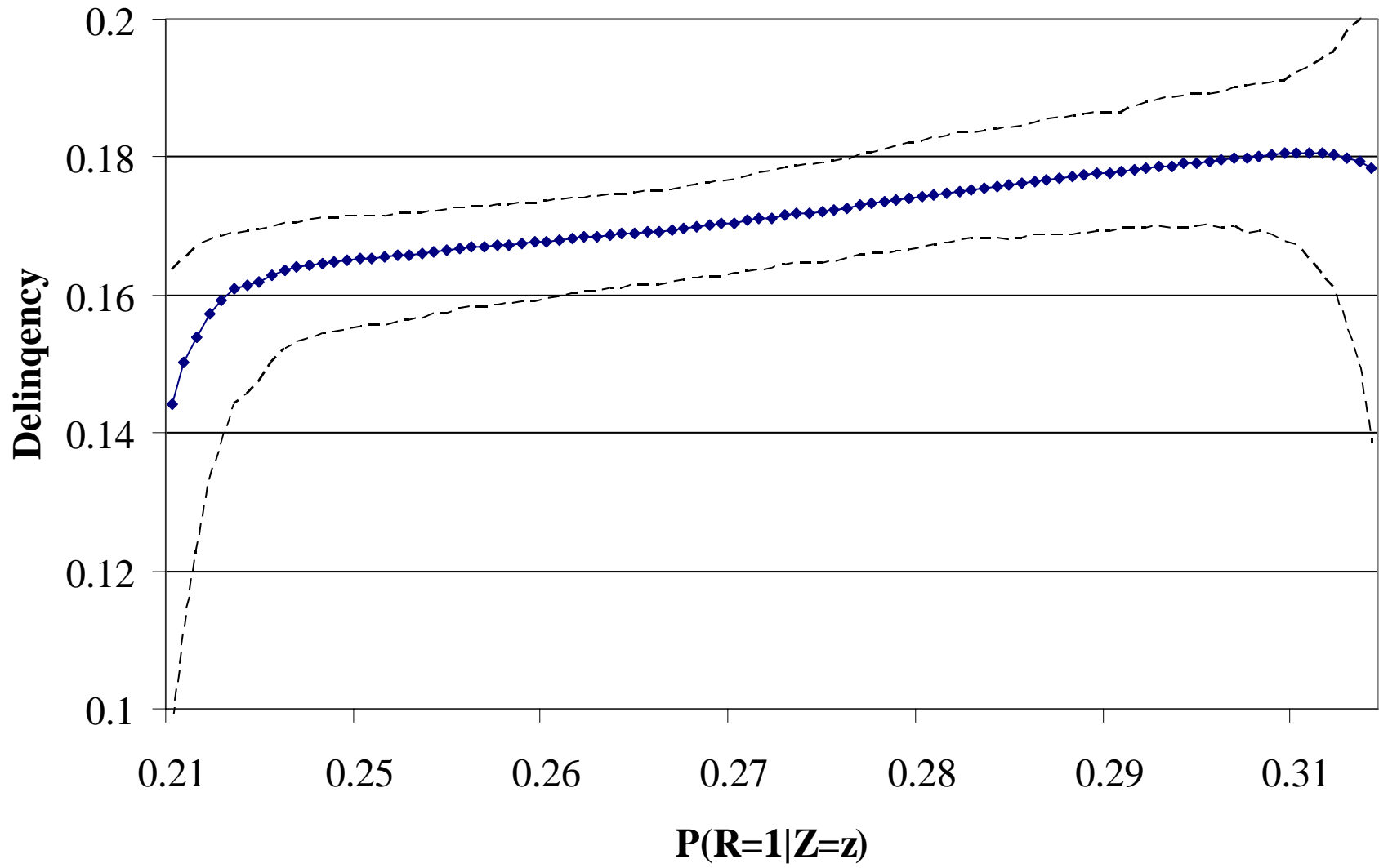


Figure 4A: Teen Motherhood as a function of $P(z)$

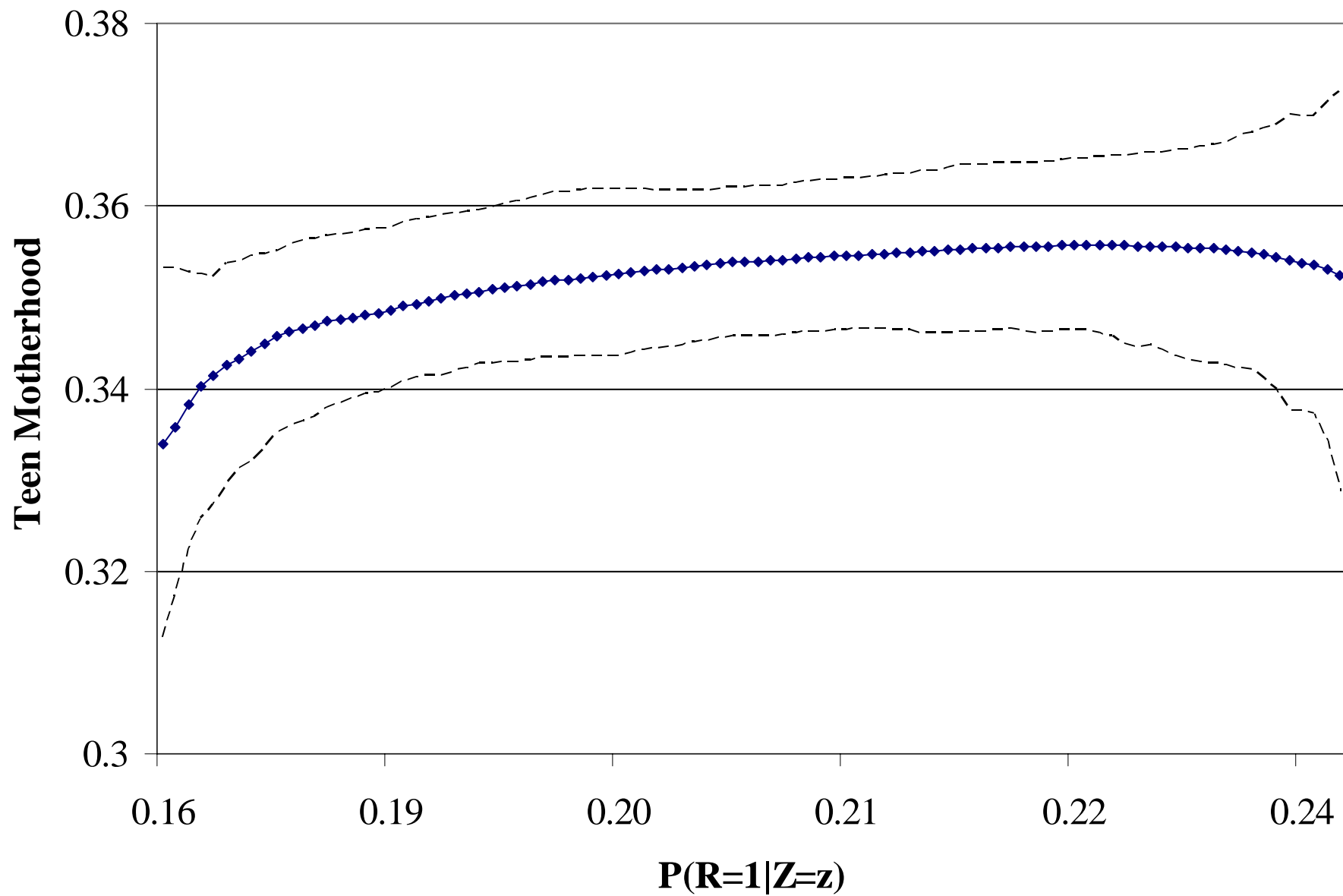
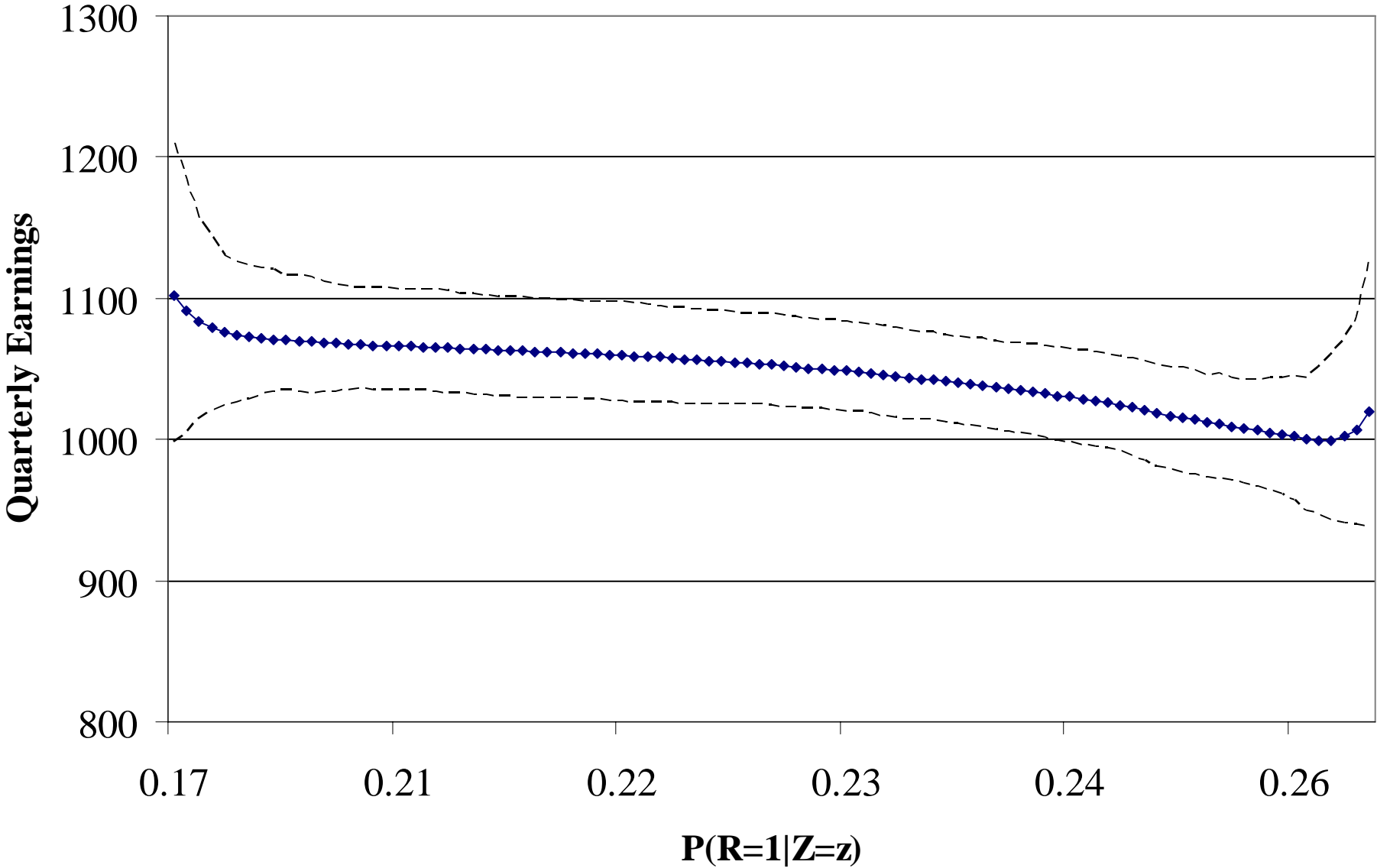


Figure 5A: Earnings as a function of P(z)



Summary: Large Effects

- Long-term Outcomes
 - 3x Higher Arrest Rate
 - 3x Higher Delinquency
 - 2x Higher Teen Motherhood
 - 40% Lower Employment
- Childhood Health:
 - No Effects for Childhood Burns / Broken Bones
 - 3x more likely to receive wellness visit

Types of Cases

- Some Evidence that “Marginal Cases” (Larger Negative Effects of Foster Care Placement) are Found for:
 - African Americans
 - Girls
 - Young adolescents (11-13 year olds)
 - Victims of Abuse (compared to neglect)
- Negative effects found across all groups, however

Limitations

- Outcomes only available for children who remain in Illinois
- Effect of Foster Care on Safety

Additional Outcomes:

- Short-term Outcomes
 - Test Scores (Chicago)
- Additional Long-term Outcomes
 - Mortality
 - Treatment for Sexually Transmitted Diseases

Illinois in 1990s vs. Florida Today

Variable	IL	FL
Median Length of Stay (months)	48	23
Kinship Placement	50%	45%
Permanency within 1 year	25%	65%

Source: US DHHS

Conclusion

- Investigator Removal Tendencies are Associated w/ Removal in Subsequent Cases
- Large Negative Effects of Removal for Marginal Cases
- Size of effects suggests caution in interpretation
- Taken together: children at the margin of removal perform better when they remain home:
 - Adult Arrests
 - Delinquency
 - Teen Pregnancy
 - Employment & Earnings

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Kinship Foster Care and Child Outcomes:

Measuring the Effects of A Change in
Financial Incentives for Relative
Caregivers

Are Children Better Off with Relative Foster Care Providers?

- Anecdotal Pros (less traumatic) & Cons (providers are parents of abusive/neglectful parents)
- Difficult to Answer
 - Lack of data
 - Homes are Chosen: Not Randomly Assigned

Are Children Better Off with Relative Foster Care Providers?

Idea: Exploit Reform in Illinois Foster Care System

- Wage offer to Relatives of New Foster Care Entrants Drops by 30% in 1995
- Compare Children Investigated Just Before & After
- Rich Data as Before
- Children “Affected by the Natural Experiment”:
Cases Whose Relatives Respond to the Change in the Subsidy Offer

Background

- Entry into Foster Care
 - Initial Report (police, physician, family...)
 - Investigation Office: Looks for Relative First
- Illinois: Large Growth in Foster Care System
 - 14,000 in 1986; 50,000 in 1995
 - Spending increased to over \$1 billion

Background

- Illinois Reform: Two-tiered system put in place
 - Licensed caregivers receive higher payment
 - Unlicensed: monthly subsidy is ~30% lower (e.g. 9-year old child: \$410 to \$285 per month)
 - In practice, few get licensed
 - Space requirements and intrusiveness given as reasons.

Figure 1:
Fraction of Foster Children Going to Relatives

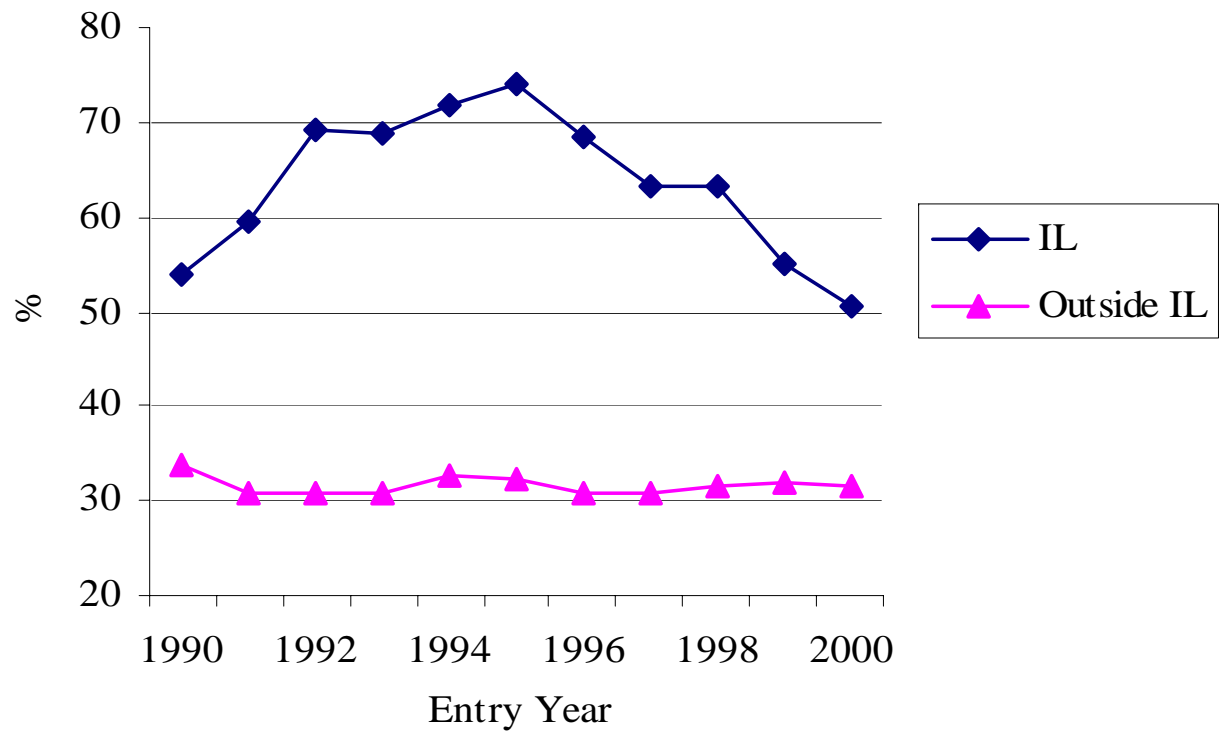
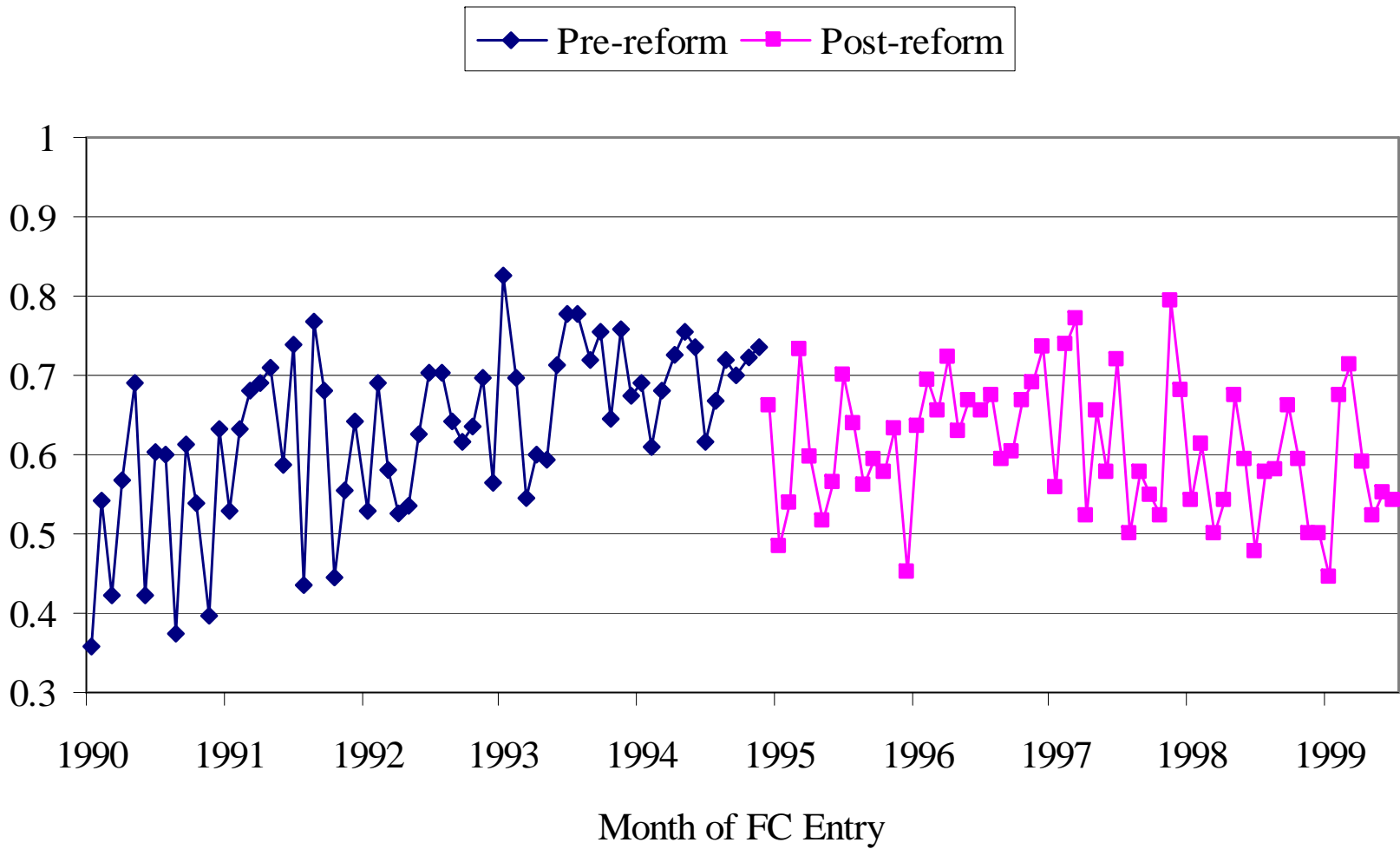


Figure 1A: Foster Children Going to Relatives



Findings

- **Care of Relatives Does Respond to Subsidy Rate**
 - 30% drop in Subsidies \Leftrightarrow Relatives are 20% less likely to provide care even among abuse cases
- **Response Varies by Child Characteristic**
 - Larger for children requiring mental health services, and children under 10

Limitation: Concurrent Reforms

Admissions of pre-existing informal kinship care
no longer allowed

Study: Considered abuse cases, with similar
results

Findings on Quality of Care

- Child Outcomes do not appear to worsen with lower subsidies
 - 1-year Quit Rate unchanged at 30% (compared to 49% for non-relative homes)
 - No change in wellness visits; injuries; test scores in Chicago Public Schools
- Traditional FC vs. Kinship FC (on the margin)
 - Selection effect may mitigate income effect

Conclusion

- Following a 30% drop in subsidies, relatives are 15-20% less likely to provide care
- Children requiring mental health services, and children under 10 saw bigger responses
- Lower subsidies did not appear to lower quality.

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Research Conclusions

- Children “on the margin of placement” in Illinois during 1990s:
Better Outcomes if remained at home
- Found across all types, particularly African American children, girls, and young adolescents
- Kinship Caregivers “on the margin of providing care” respond to financial incentives and are similar in quality to non-relative caregivers

Going Forward

- Research in Other States
(Replication/Different Settings)
- Big Questions in Child Welfare
 1. What Are the Effects of Foster Care Placement on Child Wellbeing?
 2. What Types of Placements Are Best?
Relatives/Non-Relatives/Institutions
 3. What do Practitioners Want to Know?