

The Effects of Family Policy on Reducing Inequality of Social Capital in Childbirth

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Sunbelt XXXIII

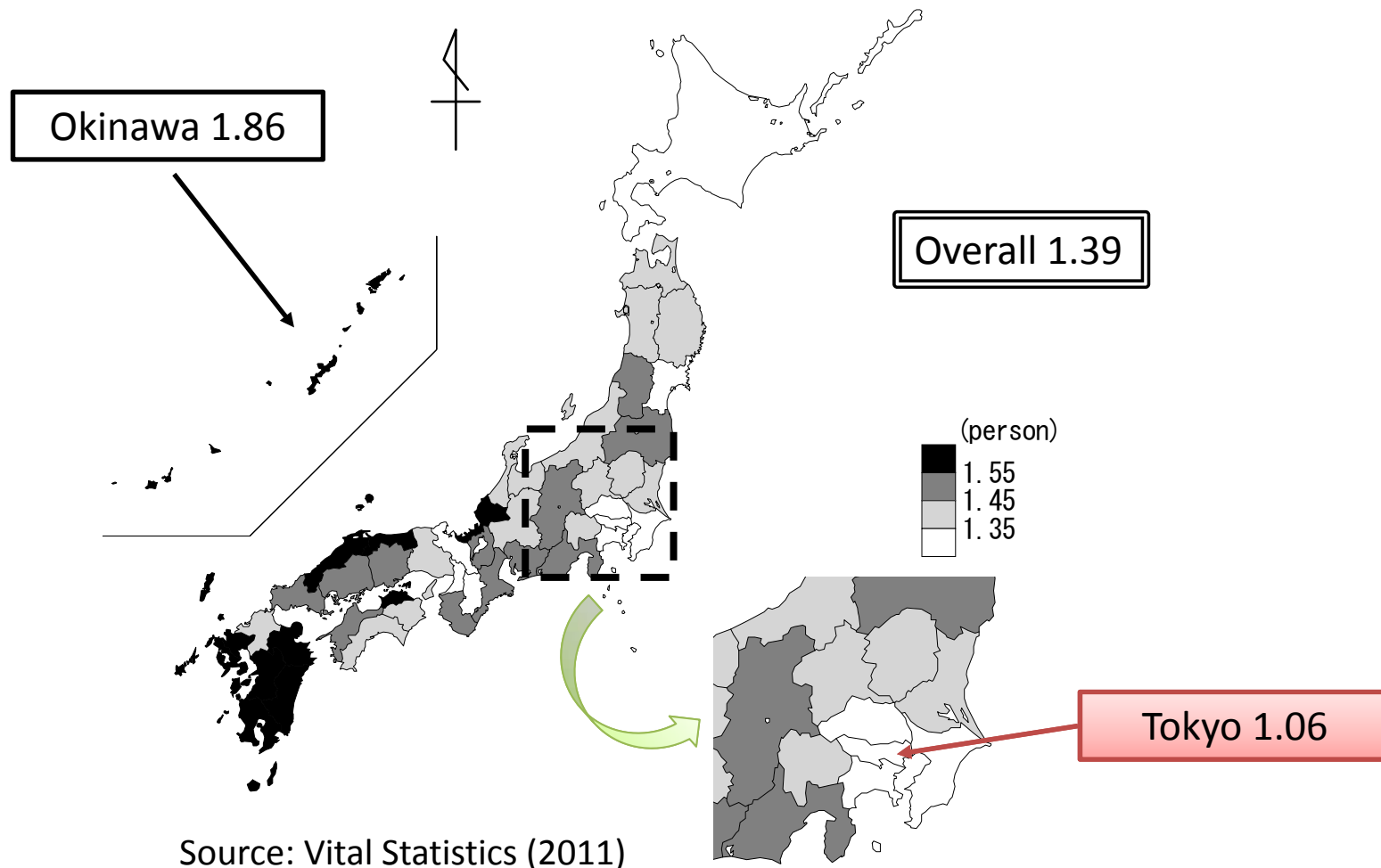
Universität Hamburg, Hamburg, Germany

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Organization of the Presentation

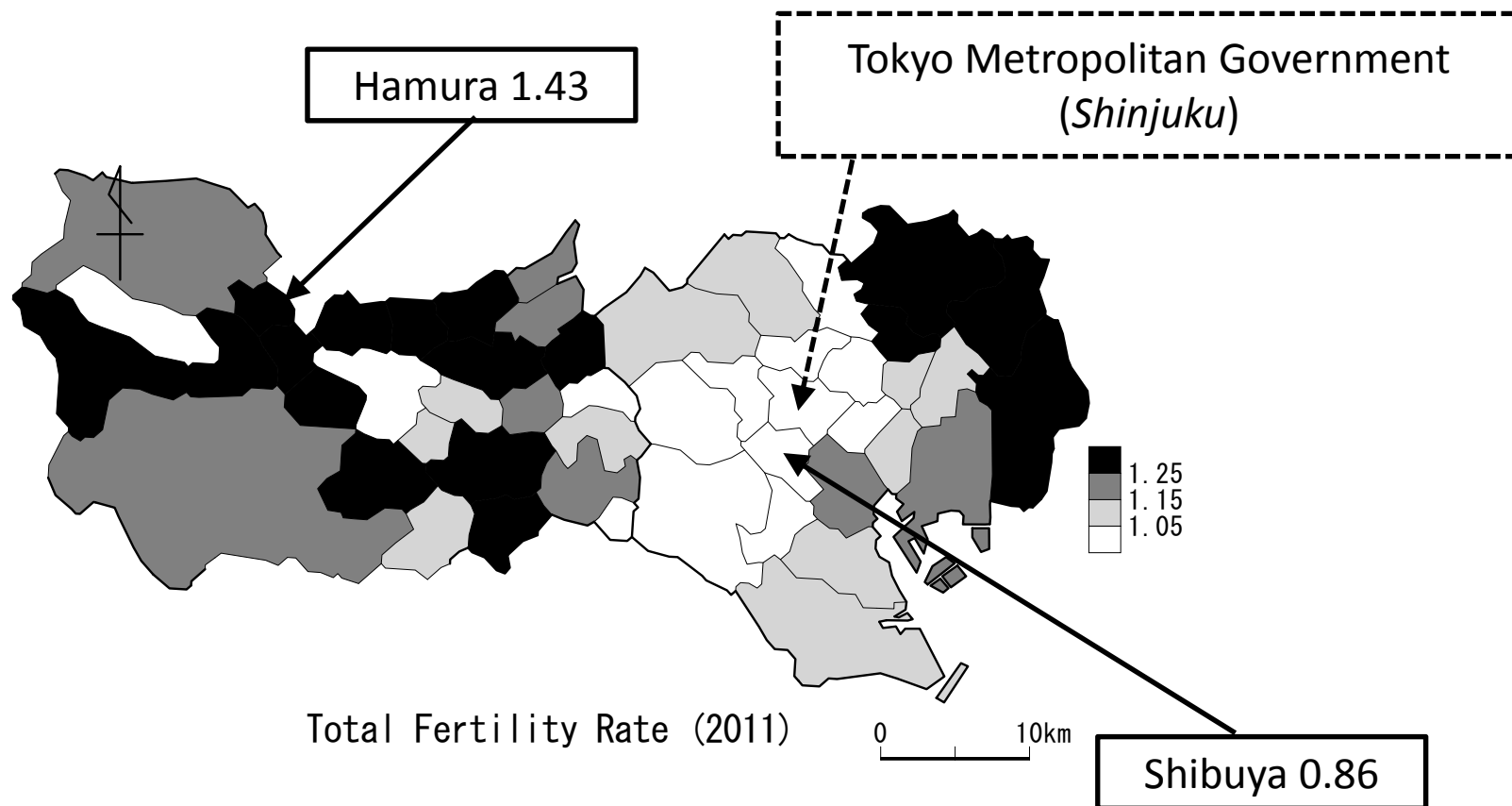
- **Puzzle:** Negative correlation b/w family policy and fertility rate?
- **Possible answer:** Latent function of rectifying the micro-level inequality of fertility behavior
- **Data and methods:** Multinomial logit
- **Findings:** Family policy reduces inequality of opportunity for family formation
- **Conclusion**

Total Fertility Rates in Japan (2011)



Source: Vital Statistics (2011)

TFRs in 49 Municipalities in Tokyo



Source: Vital Statistics (2011)

Family Policies by Municipal Governments

1. Work and life reconciliation

- Temporary day nursery
- Nursery in holidays
- 24-hour nursery

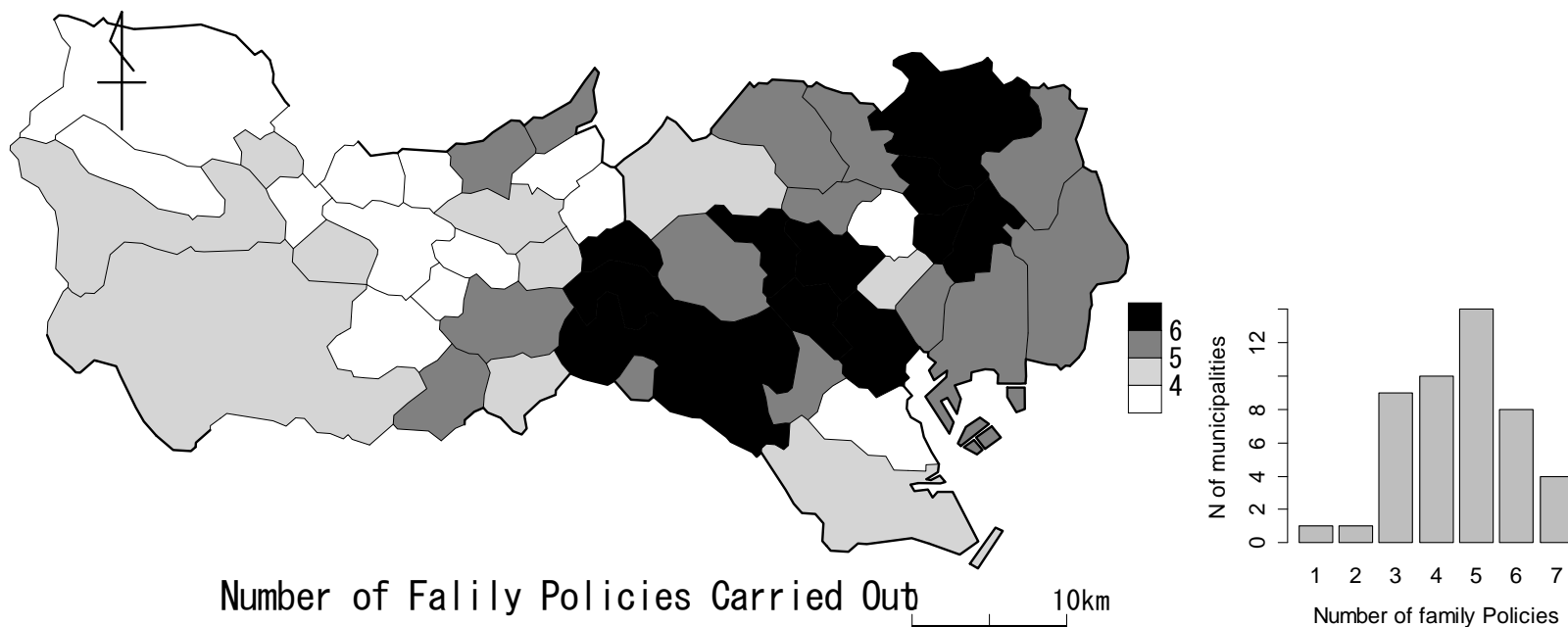
2. Financial support for childcare

- Free nursery for the third or later children
- Subsidy for unauthorized nurseries

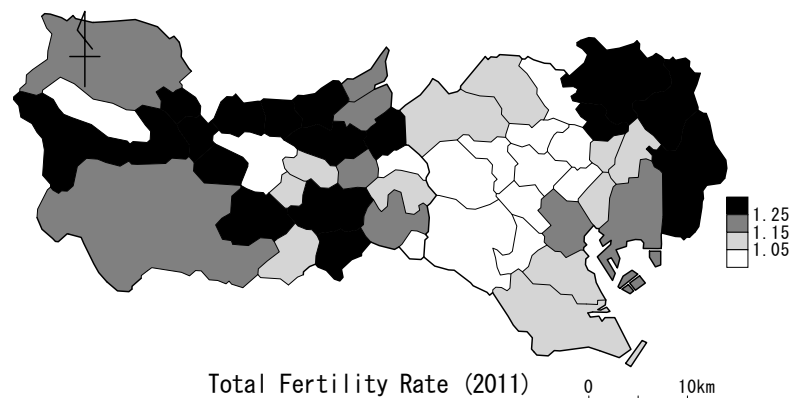
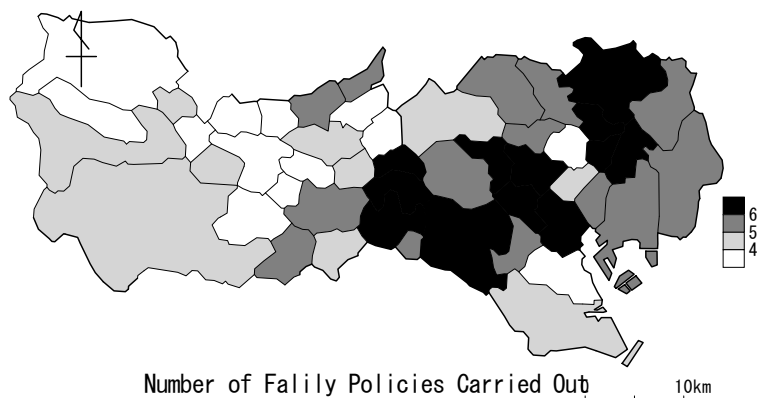
3. Encouragement of childcare by local community

- Reciprocal nursery by local community members
- Nursery by kindergartens
- Send a helper to mothers at the perinatal period

Number of Family Policies by Municipal Governments in Tokyo



Puzzle: Family Policies and TFRs? (Macro-level)

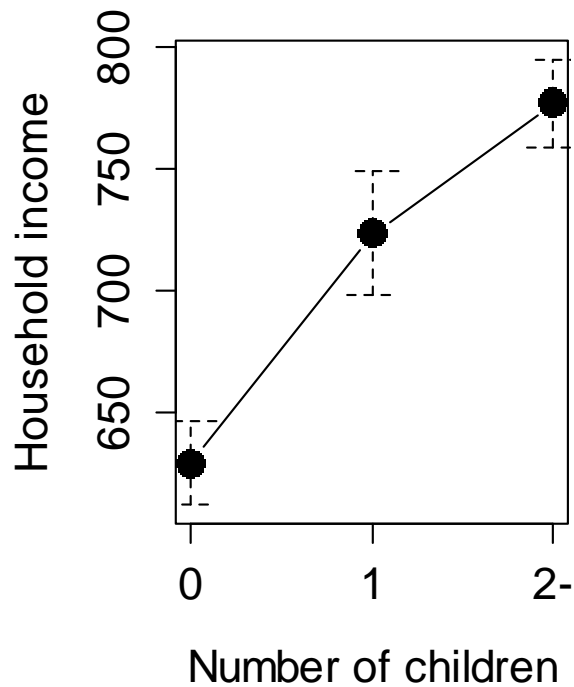


Family Policies

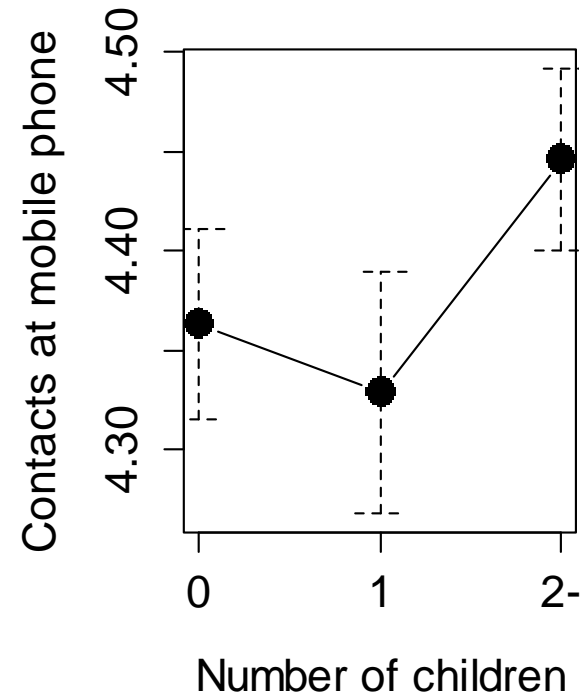
Fertility Rates

Negative correlation (-0.367)

Inequality of Family Formation? (*Micro-level*)



financial capital




social capital

Source: Tokyo Survey on Marriage and Childcare (2011)

Research Questions

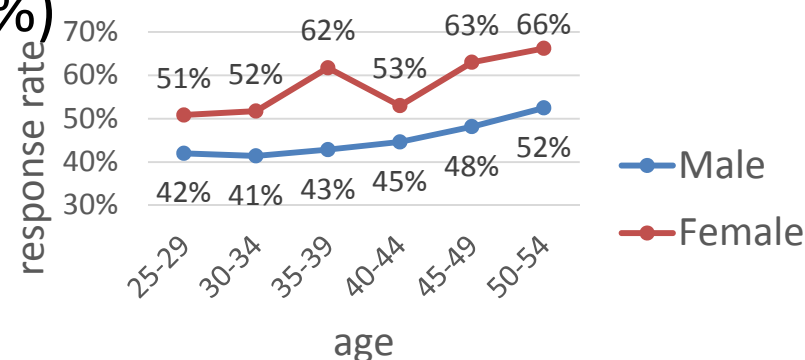
- **What is the use of family policies?**
 - They do not seem to increase fertility rate (at least in metropolitan area such as Tokyo).
 - How about their micro-level effects?
- **Do family policies reduce the micro-level inequality of family formation?**
 - Inequality of financial capital (=household income)
 - Inequality of social capital (=support by others)

1. Puzzle
2. Possible answer
-  3. Data and method
4. Descriptive statistics
5. Findings
6. Conclusion

Data

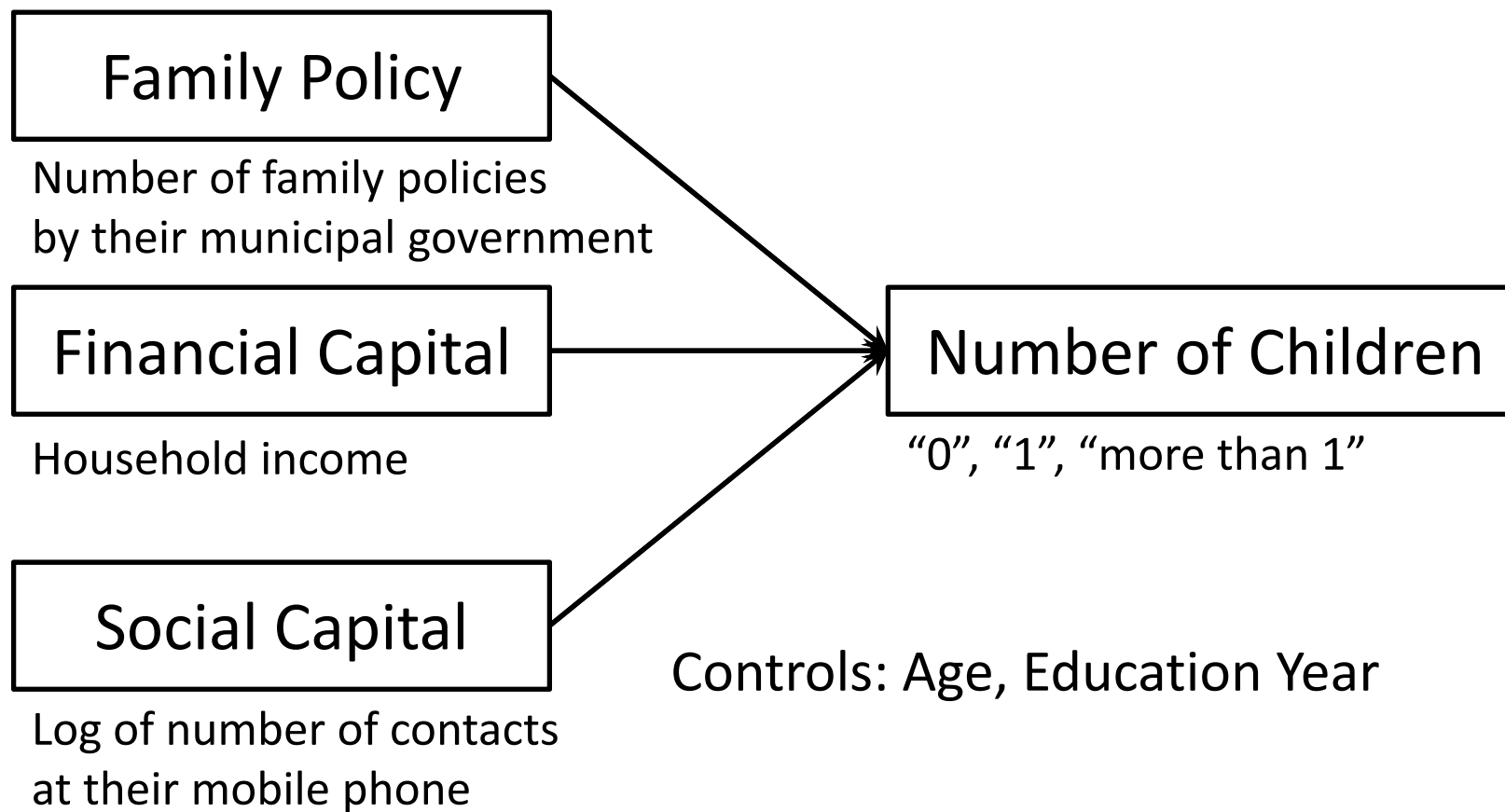
Tokyo Survey on Marriage and Childcare

- **Population:** Residents in Tokyo b/w ages of 25 and 54
- **Sample:** *Randomly* selected individuals (= representative)
 - Frame: the Basic Resident Registration Network System
 - 50 individuals from each municipality (50 x 49 = 2,450)
 - Both sexes
 - All marital statuses (single, married, divorced, widowed)
- **Method:** Mail survey (from September to October 2011)
- **Reliable responses:** 1,230 (51.0%)



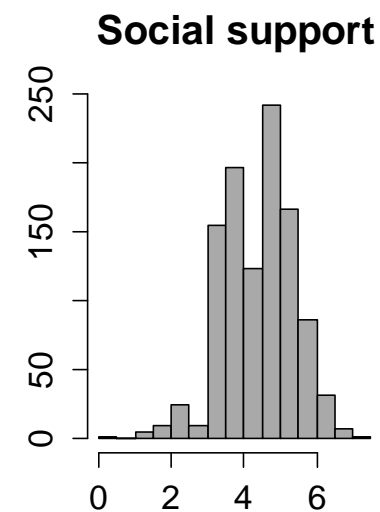
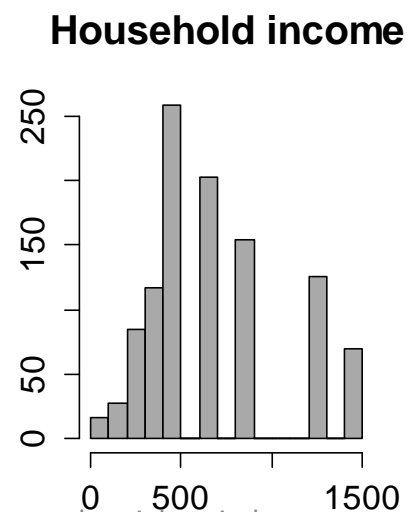
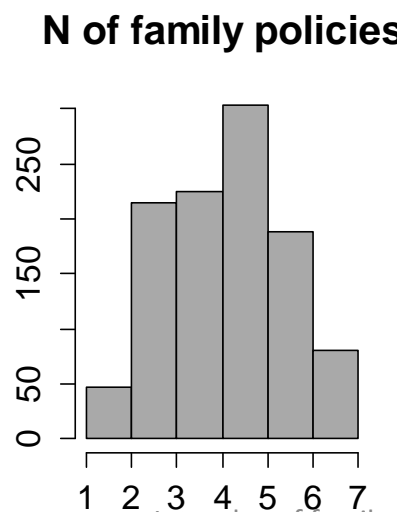
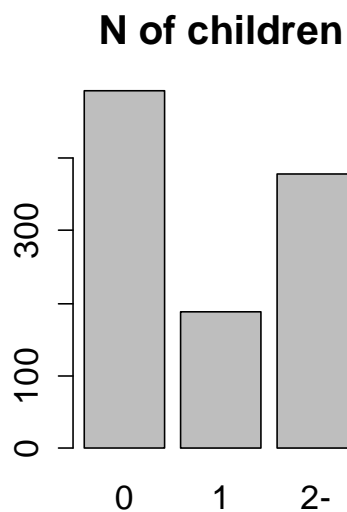
Method

Multinomial Logistic Regression



Descriptive Statistics

Variables	Range	Mean	SD
N of children	0, 1, 2-	0.985	1.056
N of family policy	1 - 7	4.560	1.368
Household income	50 – 1,500	698.7	372.3
Social support	0 – 7.018	4.387	0.965



Correlation Coefficient Matrix

	Children	Policy	Income	Support	Age
Policy	-.108 **				
Income	.180 **	.097 **			
Support	.037	.054	.165 **		
Age	.369 **	-.013	.151 **	-.102 **	
Education	-.099 **	.060	.352 **	.196 **	-.076 *

Note: $N = 1,059$. * $< .05$, ** $< .01$.

Effect on N of children...

Family Policy (-), Household Income (+), Social Support (n.s.)

Age (+), Education (-)

1. Puzzle
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Multinomial Logit of N Children

	0 → 1		1 → 2-	
	Coef.	SE	Coef.	SE
Family Policy	.398 *	.173	.119 *	.050
Income	.001 ***	.000	.001 *	.001
Social Support	.668 ***	.188	.199 ***	.041
Policy * Income			-.000 *	.000
Policy * Support	-.140 ***	.041		

Note: Reference category of DV(N Children) is "1".

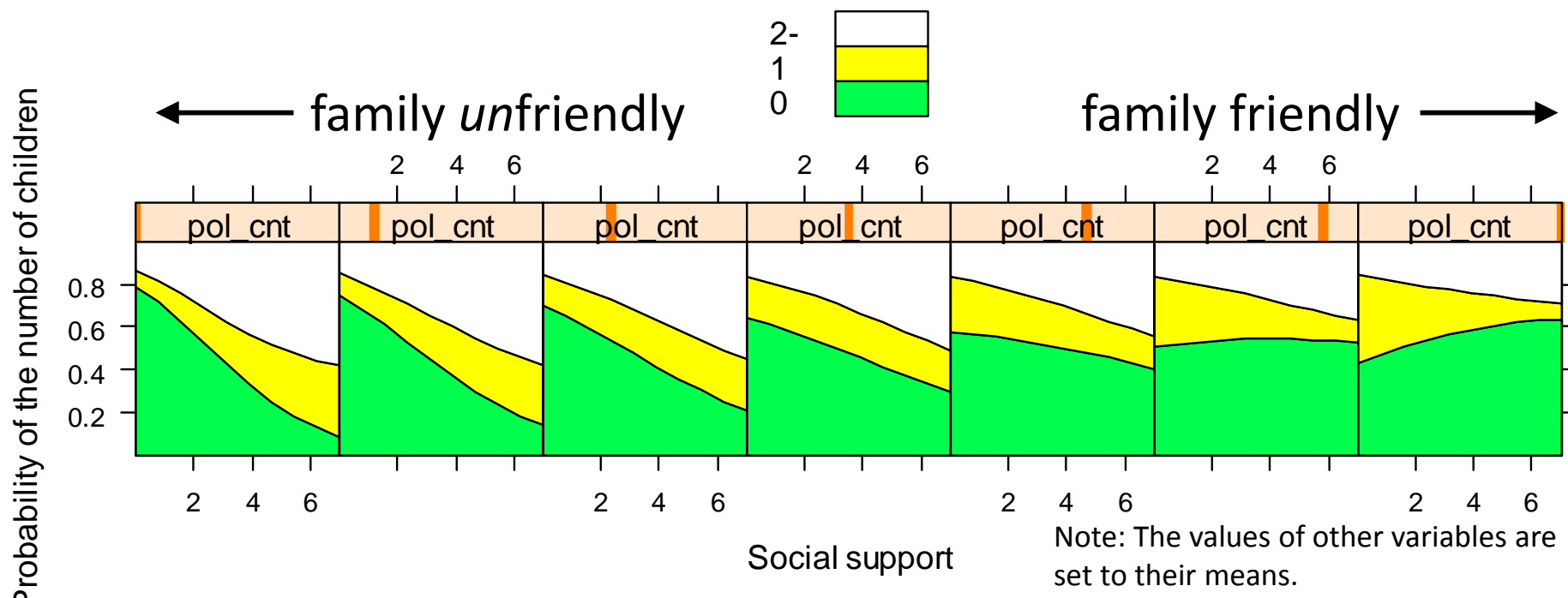
N = 1,059. * < .05, *** < .001.

Control: Age(+), Education(-).

Policy (+) ↔ Effect of
Support on N Children (-)

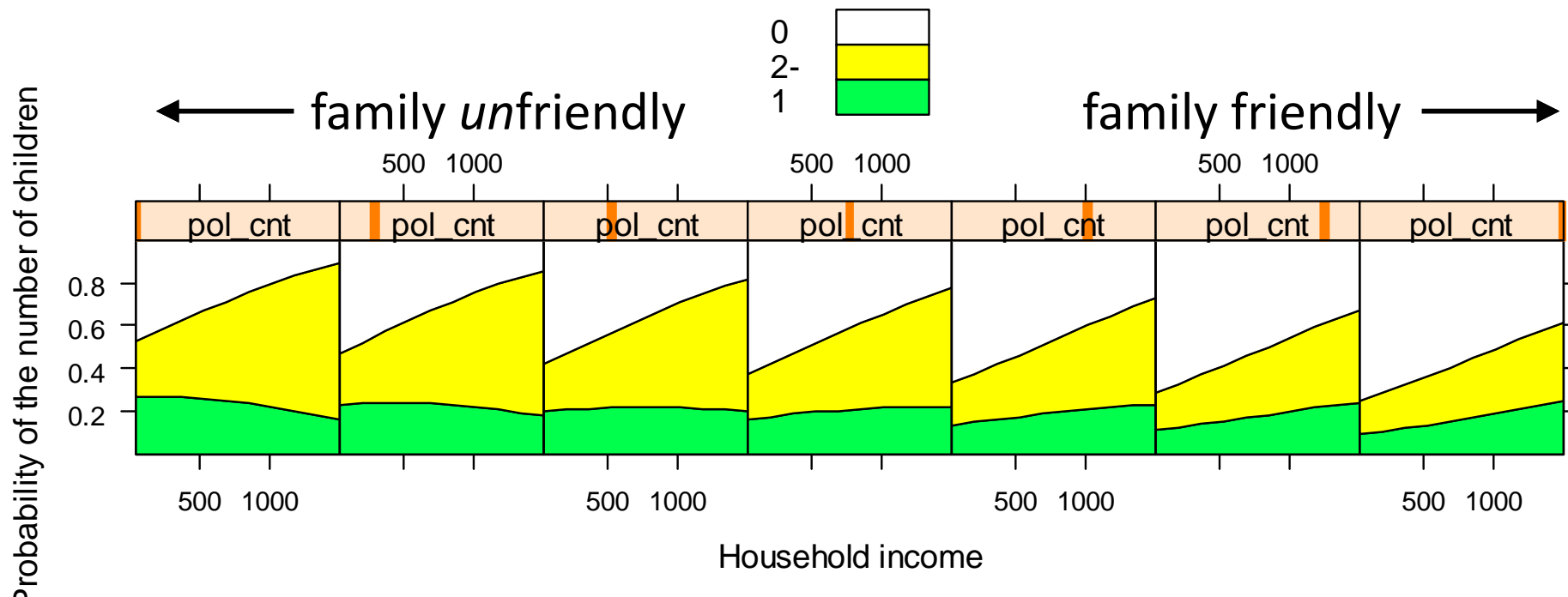
Policy (+) ↔ Effect of
Income on N Children (-)

Whether to have the *first* child...



Interaction effect b/w Policy and *Support* on N of children:
Policy (+) ↔ *Effect of Support* (-)

Whether to have the *second* child...



Interaction effect b/w Policy and *Income* on N of children:
 Policy (+) \leftrightarrow *Effect of Income* (-)

Conclusion

	0 → 1	1 → 2-
Family Policy	+	+
Household Income	+	+
Social Support	+	+
Interaction	Policy (+) ↔ Effect of <i>Support</i> (-)	Policy (+) ↔ Effect of <i>Income</i> (-)

- Puzzle: Negative correlation b/w policy and TFR at *macro-level*.
 - **Family policies promote fertility behavior at *micro-level*.**
- Question: Can family policy reduce inequality of opportunity for family formation?
 - **Yes. Family policies rectify unequal distribution of financial(=income) and social(=support) capital at *micro-level*.**

Thank you for your attention!

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