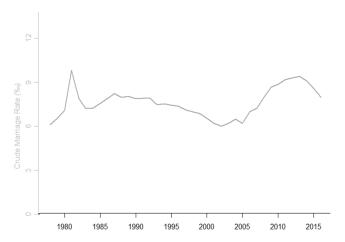
Intrahousehold Property Ownership and Children's Undesirable Behaviors in China

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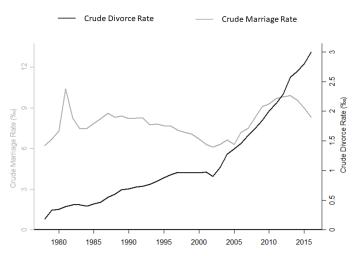
November 8, 2021

Marriage Rates in China, 1978-2016



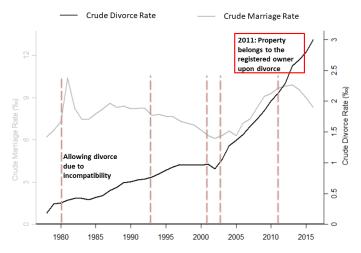
Data Source: The National Bureau of Statistics of the People's Republic of China.

Divorce and Marriage Rates in China, 1978-2016



Data Source: The National Bureau of Statistics of the People's Republic of China.

Major Changes in China's Divorce Law, 1978-2016



Data Source: The National Bureau of Statistics of the People's Republic of China.

Selected Articles in the 2011 Judicial Interpretation

Article 7

When a family home had been purchased by the parents of either spouses during the marriage, the property should be deemed a gift to that spouse

Article 10

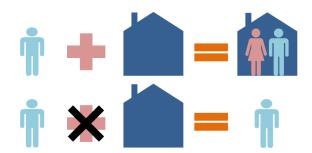
For the case of joint purchase after marriage, property ownership upon divorce would be strictly allocated to the one who made the initial down payment prior to marriage

Article 12

During their marriage, when a couple has purchased a home that was previously distributed by the work unit of one spouse's parents before the housing reform, this housing unit shall be registered under the name of the spouse's parents.

Why Would It Be Unfair to Women?

- ► The "bride price" practice
 - Housing is a precondition for marriage



Why Would it Be Unfair to Women? (Cont'd)

- The "bride price" practice
 - Housing is a precondition for marriage
 - Son preference led to a shortage of marriageable women

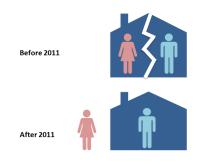




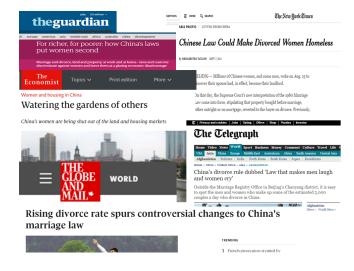
Picture Source: "Should bride prices be abolished?" chinadaily.com.cn (http://www.chinadaily.com.cn/opinion/2017-03/12/content_28335421.htm)

Why Would It Be Unfair to Women? (Cont'd)

- ► The "bride price" practice
 - Housing is a precondition for marriage
 - Son preference led to a shortage of marriageable women
- Homes were typically registered under men's names even if wives contributed toward the purchase



The Heated Discussion in Media Worldwide



Forces Behind This Legal Change

- Rapid growth in economy ⇒ wealth accumulation ⇒ establishment of the first property law in 2007
- ▶ Dramatic real estate boom ⇒ skyrocketing house prices ⇒ larger share of house in family wealth
- Increasing divorce rate ⇒ risk of losing marital houses
- More property disputes upon divorce + lack of clear law definition ⇒ controversy in judges' rulings ⇒ increasing social pressure on the government
- ► Rebuilding traditional family ⇒ maintaining social stability

Research Question

- ► How does the 2011 judicial interpretation affect children's behavioral outcomes in early adolescence (ages 10-15)?
 - Undesirable behaviors: smoking, drinking alcohol, visiting internet café, visiting KTV, visiting disco bars, in a romantic relationship, and quarrelling with parents.
 - Why undesirable behaviors in early adolescence: a critical developmental period significantly affecting later life outcomes (Moffitt 2006; Gruber 2000).

Our Contributions

- Lack of studies examining the effect of the 2011 judicial interpretation on children's outcomes
 - Zang (2020) on couples' subjective well-being and household bargaining outcomes
 - Huang et al. (2021) on household bargaining outcomes
 - Sun and Zhang (2020) on assortative mating patterns on the marriage market
- Lack of studies examining whether intrahosuehold property ownership is a determinant of children's behavioral outcomes
 - Previous studies: parental SES and investment in children, a child's popularity, parenting styles and practices, and parental relationship as determinants.

Theoretical Framework

- ► For a typical Chinese household where only the husband's name is on the deed of the family home:
 - Hypothesis 1: Household bargaining model: women's bargaining power decreases (Zang 2020, Huang et al. 2021)
 — negatively affects investment in children's human capital, family relationships, and parenting practices
 — increases children's undesirable behaviors

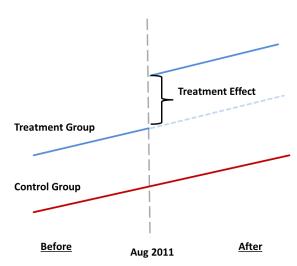
Theoretical Framework (Cont'd)

- ► For a typical Chinese household where only the husband's name is on the deed of the family home:
 - Hypothesis 1: Household bargaining/Exchange theory: women's bargaining power decreases (Zang 2020, Huang et al. 2021)
 — negatively affects investment in children's human capital, family relationships, and parenting practices increases children's undesirable behaviors
 - Hypothesis 2: Asset theory: Increased child home ownership (Zang 2020) → increases subjective social status and selfesteem, improves family relationships and parenting practices (Elliott 2013, Elliott et al. 2011) → decreases children's undesirable behaviors

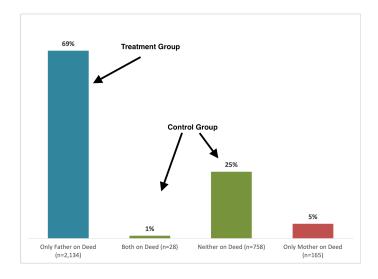
Data and Measures

- Data from the China Family Panel Studies (CFPS) 2010, 2012, and 2014 waves
 - Nationally representative sample
 - < 10% lost to sample attrition attrition
 - Sample size = 2,920 children aged 10-15 flow summary stat
- Measures of undesirable behaviors:
 - Frequencies of smoking, drinking alcohol, visiting internet café, visiting KTV, and visiting disco bars last year
 - 1) not at all, 2) several times a year, 3) once a month, 4) 2-3 times a month, 5) several times a week, 6) almost every day
 - An undesirable behavior index by averaging the frequencies
 - Whether in a romantic relationship and number of quarrels with parents last month (Xie and Hu, 2015)

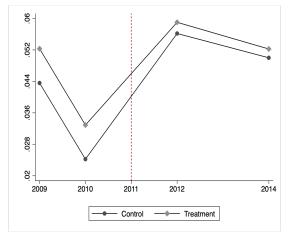
Empirical Strategy: Difference-in-Differences (DID)



Construction of Treatment and Control Groups



Trends of Undesirable Behaviors by Treatment Status



Data source: China Family Panel Studies (CFPS) 2010, 2012, and 2014 waves and experimental survey in 2009. CFPS experimental surveys were only conducted in Beijing, Shanghai, Guangdong.

Model Specification

We apply a DID strategy:

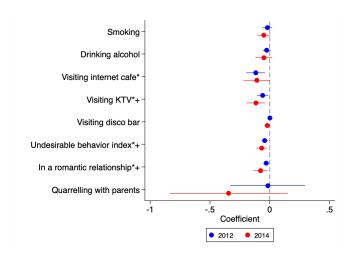
$$Y_{it} = \beta_1 \left(\mathsf{Treat}_i \times \mathsf{Year} 2012_t \right) + \beta_2 \left(\mathsf{Treat}_i \times \mathsf{Year} 2014_t \right) + \gamma X_{it} + \eta_i + \delta_t + \epsilon_{it}$$

- $ightharpoonup Y_{it}$: undesirable behaviors
- Treat_i: treatment group indicator
- ➤ Year2012_t: 2012 indicator
- ► Year2014_t: 2014 indicator
- \triangleright X_{it} : age and age square
- $\triangleright \eta_i$: individual fixed effects
- \triangleright δ_t : year fixed effects

Only Father on Deed

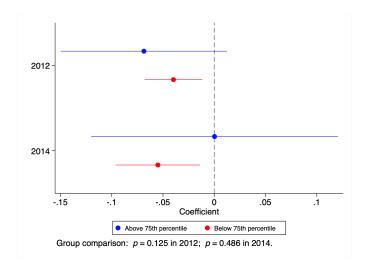
Results

Main Outcomes: Children's Undesirable Behaviors

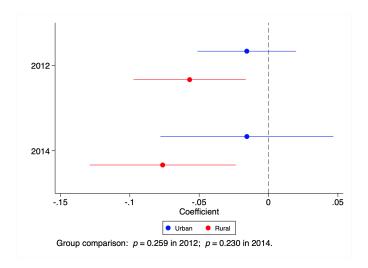


Note: * significant in 2012; + significant in 2014.

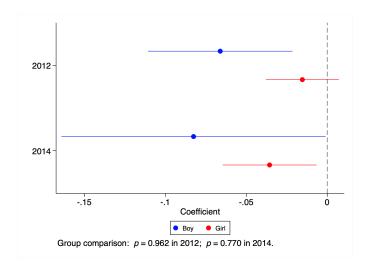
Heterogeneous Analysis: Household Income



Heterogeneous Analysis: Urban Status

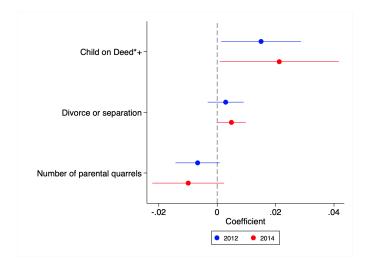


Heterogeneous Analysis: Gender



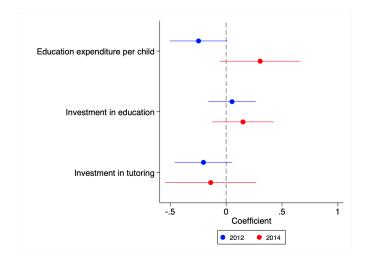
Mechanism Analyses

Child Home Ownership and Parental Relationships

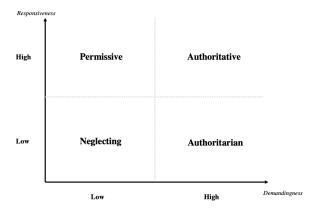


Note: * significant in 2012; + significant in 2014.

Parental Investment in Children

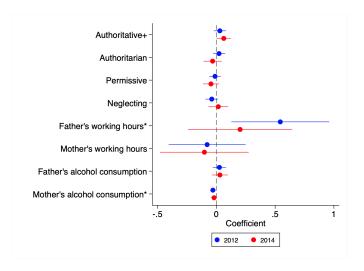


Definition of Parenting Styles



Source: Figure 1 in Zhang and Qin (2019)

Improved Parenting Practices (Suggestive Evidence)



Note: * significant in 2012; + significant in 2014.

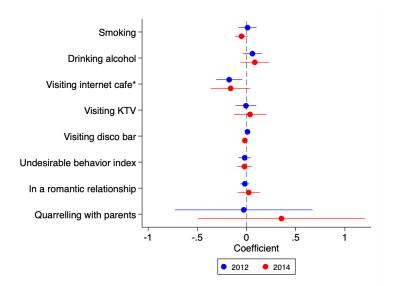
Other Potential Mechanisms

- Parental educational expectation
 - Years of schooling the parent hopes the child will attain
 - Whether or not care about the child's education
- Children's cognitive ability
 - Standardized scores of vocabulary and numerical tests
 - Self-reported class rank of Chinese and Math tests
- Children's non-cognitive ability
 - Self rated level of confidence
 - Index of self-esteem
 - Index of responsibility
 - Index of locus of control

Results

Only Mother on Deed

Main Outcomes: Children's Undesirable Behaviors



Conclusion

- ► This study is the first to examine the consequences of the 2011 judicial interpretation on children's behavioral outcomes.
 - The reform decreased children's undesirable behaviors in 2012 and 2014 by 4% and 7%.
 - The reduction was particularly large among children from disadvantaged backgrounds.
 - The effect was likely driven by increased child home ownership and improved parenting practices.

Limitations

► The heterogeneous effects by developmental stages

 Potential unobserved time-varying characteristics that affect the treatment and the control groups differently

Policy Implications

Discussions on policies promoting asset building for children

\$1,000 'Baby Bond' Proposed in N.J. in Bid to Narrow the Wealth Gap

A plan would set aside money at birth for children in most families, giving them a financial lift when they reach 18 and enter adulthood.



"The inequities are too wide, too raw, to ignore," Gov. Phillip D. Murphy of New Jersey said. Pool photo by Anne-Marie Caruso

Thank You!

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Summary Statistics

Table 2. Baseline Descriptive Statistics by Treatment Status

	Percent missing	Control	Treatment	Difference	P-value
Male	0.00	0.532	0.478	0.053**	0.011
First born	0.00	0.850	0.848	0.002	0.910
Age	0.00	12.372	12.635	-0.263***	0.000
Urban	0.00	0.447	0.305	0.142***	0.000
Migrant	0.00	0.038	0.003	0.035***	0.000
High parental education	0.00	0.247	0.154	0.093***	0.000
Bad parental relationship	0.04	0.179	0.157	0.022	0.165
Living in provinces with high divorce rates	0.00	0.190	0.190	-0.001	0.967
Log household income per capita	0.04	8.236	8.280	-0.044	0.282
Grandparents alive	0.00	0.785	0.932	-0.147***	0.000
Living with Grandparents	0.00	0.207	0.408	-0.201***	0.000
Number of Siblings	0.05	1.084	1.172	-0.088**	0.048
Family Size	0.00	4.721	4.961	-0.240***	0.000
N		786	2134		



Attrition Analysis

Appendix Table A2. Attrition Analysis

	Attrition in 2012	Attrition in 2014	Attrition in 2012	Attrition in 2014
Treat	0.012	-0.008		
	(0.018)	(0.016)		
Treat (excluding renters)			0.016	-0.003
			(0.018)	(0.017)
# observations	1744	1744	1673	1673

Note: *p < 0.1, *p < 0.05, ***p < 0.01. Controls include all variables listed in Table 2. Standard errors in parentheses are clustered at the household level.



Sample Construction Flow

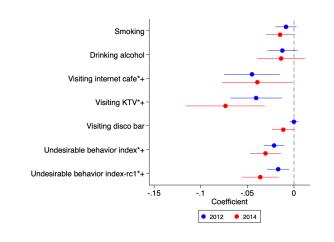
Table 1. Sample Construction Flow

	Sample restriction	# individuals excluded	# individuals remained
1	Total CFPS 2010 children participants aged 10-15		3,464
2	Keep children tracked by at least one follow-up wave	217	3,247
3	Keep children with information on parental home ownership status in 2010	6	3,241
4	Keep children in married families in 2010	156	3,085
5	Exclude children in households where only the mother's name was on the deed in 2010	165	2,920
6	Final sample		2,920

Data source: Data come from the CFPS 2010-2014 waves.

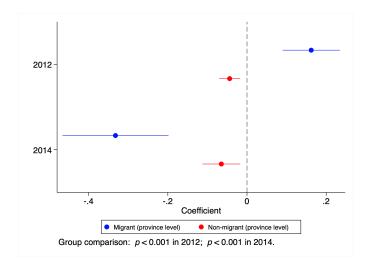


Robustness Checks: Alternative Definition

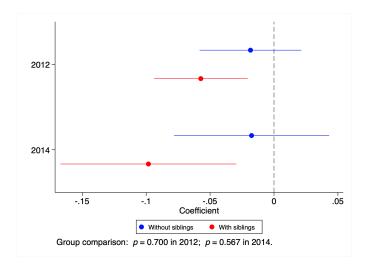


Note: * significant in 2012; + significant in 2014; rc1 refers to the index composed of all dummy indicators of smoking, drinking alcohol, visiting internet cafe, visiting KTV, visiting disco bar, in a romantic relationship, and quarrelling with parents.

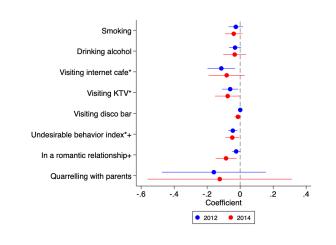
Heterogeneous Analysis: Migration Status



Heterogeneous Analysis: Sibling Structure



Excluding Renters: Children's Undesirable Behaviors



Note: * significant in 2012; + significant in 2014.