# Gender Disparities in Divorce Laws: Incentivizing Women's Education

Lele 7hao

Tulane University

January 4, 2025

#### The New York Times

LETTER FROM CHINA

# Chinese Law Could Make Divorced Women Homeless



#### By Didi Kirsten Tatlow

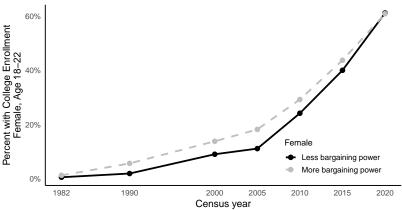
Sept. 7, 2011

BEIJING — Millions of Chinese women, and some men, woke on Aug. 13 to discover their spouse had, in effect, become their landlord.

On that day, the Supreme Court's new interpretation of the 1980 Marriage Law came into force, stipulating that property bought before marriage, either outright or on mortgage, reverted to the buyer on divorce. Previously, the family home had been considered joint property. Experts agree the change would mostly affect women, since men traditionally provide the family home.

# Education Gap within Females

#### Reversed Female College Enrollment Gap by Bargaining Power in China



### Overview

- Research Question: How do females choose their education when anticipating a decrease in property rights within marriage?
- Data: Chinese General Social Survey (CGSS), 2003-2018
- Method: Difference-in-Differences
  - Leverages geographic variation in sex ratios in the marriage market across provinces
- Results: Increased educational investment among females
  - $\circ$  High school graduation rates o
  - College enrollment rates ↑
    - ▶ Four-year college enrollment ↑
    - $\triangleright$  Three-year college enrollment  $\rightarrow$

### Divorce Law Reform: Timeline

Judicial Interpretation about Immovable Property upon Divorce

August 2011

Before After
House equally divided House belongs to the registered owner

### Divorce Law Reform: Implications and Reasons

- Gender neutral or not?
  - In 2010, 87% of houses were registered solely in the male's name, 12% solely in the female's name, and 1.6% jointly.
  - Land and housing assets represented around 80% of household wealth in 2012 (Xie and Jin, 2015)<sup>2</sup>.

Lele Zhao, Tulane University

China Family Panel Studies (2010)

 $<sup>\</sup>frac{1}{3}$  in U.S. (Wolff, 2016)

## Divorce Law Reform: Implications and Reasons

#### Gender neutral or not?

- In 2010, 87% of houses were registered solely in the male's name, 12% solely in the female's name, and 1.6% jointly.
- Land and housing assets represented around 80% of household wealth in 2012 (Xie and Jin, 2015)<sup>2</sup>.
- $\circ \to \mathsf{Expected}$  loss in assets for women

#### Reasons behind the reform

- Men's families increasingly felt threatened by the loss of such a large share of household wealth upon their sons' divorces, which was "unfair to them" (The Chinese Supreme Court, 2011).
- Addresses the ambiguity in the existing law to avoid different judgments on the same case

China Family Panel Studies (2010)

 $<sup>\</sup>frac{1}{3}$  in U.S. (Wolff, 2016)

• National policy  $\to$  geographic variation  $\to$  sex ratio in the marriage market by province

<sup>&</sup>lt;sup>3</sup> Li et al. (2016)

<sup>&</sup>lt;sup>4</sup> 1% population sample Lele Zhao, Tulane University

- National policy  $\to$  geographic variation  $\to$  sex ratio in the marriage market by province
- Median age of marriage in 2010
  - o 22 for female, 24 for male

<sup>&</sup>lt;sup>3</sup> Li et al. (2016)

<sup>&</sup>lt;sup>4</sup> 1% population sample

- National policy o geographic variation o sex ratio in the marriage market by province
- Median age of marriage in 2010
  - o 22 for female, 24 for male
- $\frac{\text{\# males aged } 12\text{-}14}{\text{\# females aged } 10\text{-}12}$  by province in 2000, Census 2000<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> Li et al. (2016)

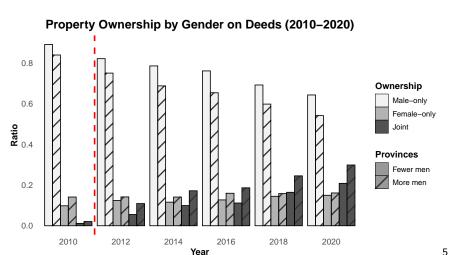
<sup>&</sup>lt;sup>4</sup> 1% population sample

- National policy o geographic variation o sex ratio in the marriage market by province
- Median age of marriage in 2010
  - o 22 for female, 24 for male
- $\frac{\text{\# males aged } 12\text{-}14}{\text{\# females aged } 10\text{-}12}$  by province in 2000, Census 2000<sup>4</sup>
- Separate provinces into treatment and control based on median of sex ratio
  - Lower sex ratio → treatment group
  - $\circ$  Higher sex ratio  $\to$  control group

<sup>&</sup>lt;sup>3</sup> Li et al. (2016)

<sup>1%</sup> population sample

# Sex Ratio and Property Ownership



8 / 21

Data from China Family Panel Studies (CFPS) 2010-2020 Marriage and Education

### How Sex Ratio Affects Education After the Reform, Females

Higher sex ratio  $\rightarrow$  More men





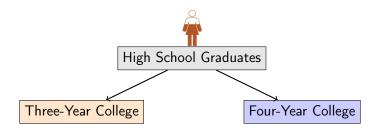
 Women have more bargaining power in the marriage market less incentive to invest in education Lower sex ratio  $\rightarrow$  Fewer men



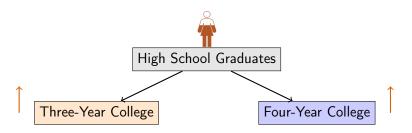


 Women have less bargaining power in the marriage market more incentive to invest in education

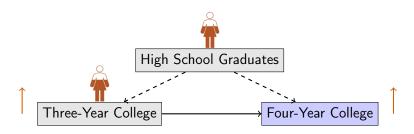
# Lower Sex Ratio $\mathring{\mathbf{T}} \longrightarrow \mathsf{College}$ Enrollment? Females



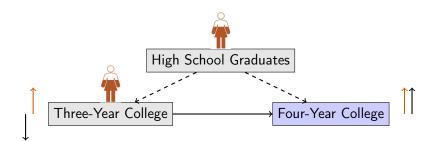
# Lower Sex Ratio $\mathring{\mathbf{T}} \longrightarrow \mathsf{College}$ Enrollment? Females



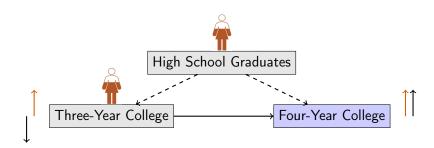
# Lower Sex Ratio $\widehat{\mathbf{T}}$ $\widehat{\mathbf{T}}$ $\rightarrow$ College Enrollment? Females



# Lower Sex Ratio $\widehat{\mathbf{T}}$ $\widehat{\mathbf{T}}$ $\rightarrow$ College Enrollment? Females



# Lower Sex Ratio $\widehat{\mathbf{T}}$ $\widehat{\mathbf{T}}$ $\rightarrow$ College Enrollment? Females



### Hypothesis:

- College enrollment ↑
- Four-year college enrollment ↑
- Three-year college enrollment?

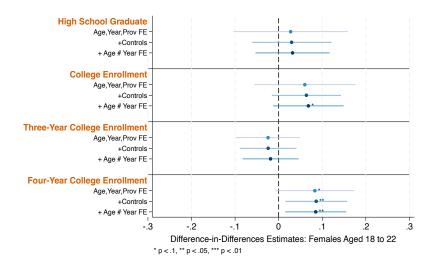
### Data and Method

- Chinese General Social Survey (CGSS) 2003-2018
  - Repeated cross-sectional data, 11 waves
  - Age limited to 18-22 Age Limit
  - o Female, 2,651

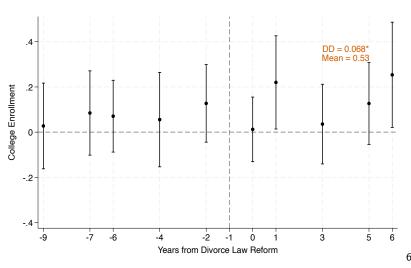
### Data and Method

- Chinese General Social Survey (CGSS) 2003-2018
  - Repeated cross-sectional data, 11 waves
  - Age limited to 18-22 Age Limit
  - o Female, 2,651
- Difference-in-Differences
  - $\circ \ \ \textit{Y}_{\textit{ipt}} = \alpha + \beta \textit{Treated}_{\textit{p}} * \textit{Post}_{\textit{t}} + \textit{X}_{\textit{ipt}} + \gamma_{\textit{Prov}} + \theta_{\textit{Year}} + \delta_{\textit{Age}} + \epsilon_{\textit{ipt}}$
  - o  $Treated_p$ , indicator for living in a province with fewer men in 2010
  - o Post<sub>t</sub>, indicator for after 2011
  - X<sub>ipt</sub>, individual and provincial controls
  - Standard errors clustered at the province level
  - Regressions are using sample weights
  - Robustness checks:
    - Age#Year fixed effects

### Divorce Law Reform on Women's Education

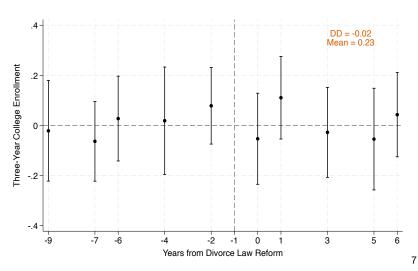


# Event Study: College Enrollment



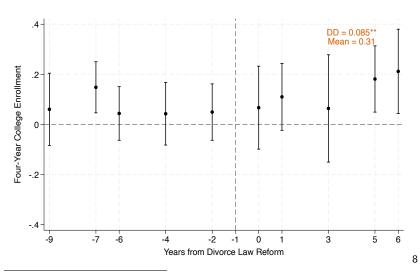
<sup>&</sup>lt;sup>6</sup> Age# Year, province fixed effects + controls; weighted; 95% C.I. based on standard errors clustered by province.

# Event Study: Three-Year College Enrollment



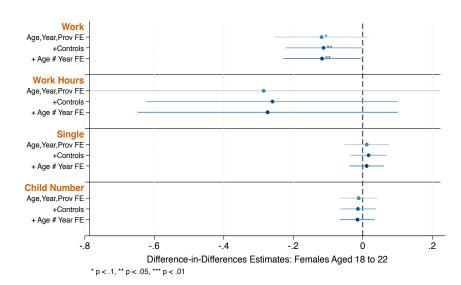
<sup>&</sup>lt;sup>7</sup> Age# Year, province fixed effects + controls; weighted; 95% C.I. based on standard errors clustered by province.

# Event Study: Four-Year College Enrollment



<sup>&</sup>lt;sup>8</sup> Age#Year, province fixed effects + controls; weighted; 95% C.I. based on standard errors clustered by province.

### Labor and Marriage Outcomes



- The 2011 divorce law reform creates a "male advantage"
  - Encourages females to increase their investment in education

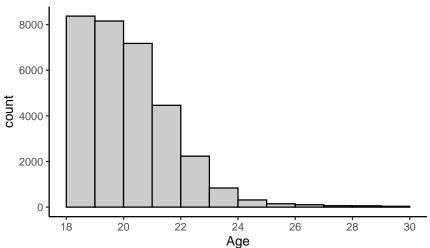
- The 2011 divorce law reform creates a "male advantage"
  - o Encourages females to increase their investment in education
- Implications
  - Education can serve as "insurance" in the marriage market

- The 2011 divorce law reform creates a "male advantage"
  - o Encourages females to increase their investment in education
- Implications
  - Education can serve as "insurance" in the marriage market
  - Partly explains the recent decade-long decline in marriage and birth rates in China, which have reached their lowest points since the 1980s.

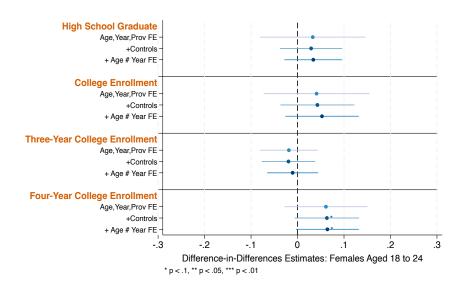
- The 2011 divorce law reform creates a "male advantage"
  - o Encourages females to increase their investment in education
- Implications
  - Education can serve as "insurance" in the marriage market
  - Partly explains the recent decade-long decline in marriage and birth rates in China, which have reached their lowest points since the 1980s.
  - Highlights the crucial role of the interaction between educational choices and the marriage market in analyzing the long-term impacts of policy changes.

### Appendix 1: Age Distribution





### Appendix 2: Age Limit: 18-24



# Appendix 3: Dosage Difference-in-Differences Estimates

	College Enrollment		
	All	Three-Year	Four-Year
	(1)	(2)	(3)
$\overline{\text{Sex Ratio}_{2010} \times \text{Post}}$	-0.032**	0.001	-0.031*
	(0.014)	(0.012)	(0.016)
Controls	Yes	Yes	Yes
Age#Year FE	Yes	Yes	Yes
Province FE	Yes	Yes	Yes
Observations	2,649	2,649	2,649

Sex Ratio<sub>2010</sub> is standardized.

Standard errors in parentheses.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1