Reserving Female Status —Women Reserved Seats and Gender Empowerment in Taiwan

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Background

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Background

A Progressive Gender Perspective of *ROC Consitution*

> 中華民國憲法第 *134* 條
>
> 各種選舉，應規定婦女當選名額，其辦法以法律定之。

- Mandatory women reserved seats in *any* election codified in *ROC Constitution* since 1946
  - Established long before new left feminism movement in 1960s Western world
  - Mainly Influenced by May Fourth Movement (新文化運動) and KMT-CCP Alliance (聯俄容共) (黃長玲，2012)

Past researches on effects of women political representation utilized a natural experiment in India

1993 Constitution Amendment in India

- 1/3 seats reserved for women in local council elections
- Higher female political representation due to this policy
- **Identification**: States adopting this policy was designated randomly, causing random treatment and time variation

Outcomes: son preference, crime against women, educational attainment/investment, gender attitudes, etc.

- Local council elections in Taiwan reserved 1 woman seat per 4 elected member
    - That is, guaranteeing 14% ~ 25% female representatives
- The rule of reserving seats in Taiwan provides neat identification of policy effect than India

Main Question

- Effects of women reserved seats on **female political representation**
- And its corresponding effects on **female social status**

Data and Identification Strategy

Treatment

Elected Female Ratio $E_{tCT} = \frac{\text{Female Member Size 女性當選人數}}{\text{Member Size 應選人數}}$,

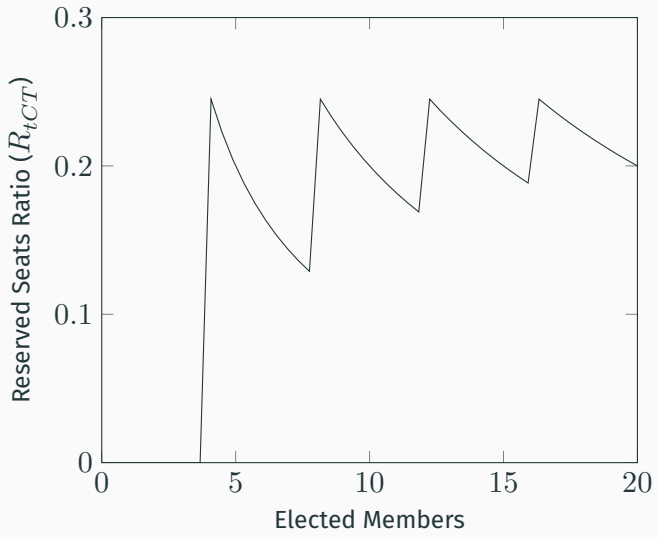
gathered from City Council Elections:

- from 1998 to 2018 (6 periods in total)
- Electoral district level

We use IV to deal with endogeneity of E_{tCT}, instrumented by the ratio of reserved seats for women R_{tCT}.

Instrumenting E_{tCT} by Reserved Seats Ratio R_{tCT}

Reserved Seats Ratio $R_{tCT} = \frac{\text{Reserved Seats 保留名額數}}{\text{Member Size 應選人數}}$, in period t, county C, and township T



We capture this discontinuous "ticks" as instrument of treatment.

Exclusion Restriction

Since reserved seats could only be "displayed" if candidates were actually elected, i.e. E_{tCT} is the only channel that R_{tCT} might affect outcomes.

Outcomes

- **1st Stage**: Effects of women reserved seats R_{tCT} on **female political representation** E_{tCT}
- **2nd Stage**: its corresponding effects on **female social status**, including:
  1. Female Leadership in Labor Market

     (Family Income Expenditure Survey 家庭收支調查 between 1998 to 2018)
  2. Son Preference

     (Newborns Birth Data 出生人口檔 between 1998 to 2006)

Estimations

2SLS Specification

- Treatment: county/township level
- Outcome: individual level

$$Y_{itCT} = \alpha + \beta_1 \widehat{E_{tCT}} + (\delta_t + \delta_C) + (\gamma_1 \text{ population}_C + \gamma_2' \mathbf{x}_i) + \epsilon_i$$

$$\widehat{E_{tCT}} = \alpha + \beta_1 R_{tCT} + (\delta_t + \delta_C) + (\gamma_1 \text{ population}_C + \gamma_2' \mathbf{x}_i)$$

First Stage

Table 1: 2SLS 1st Stage

	(1) elected_female_ratio	(2) candidates_female_ratio
rsv_seats_ratio	0.917***	0.781***
	(0.0785)	(0.0634)
Population Control	Yes	Yes
Election Year FE	Yes	Yes
County FE	Yes	Yes
Observations	966	966

Standard errors in parentheses

$^{*}\ p < 0.05, ^{**}\ p < 0.01, ^{***}\ p < 0.001$

Outcome: Female Leadership

Table 2: 2SLS Female Leadership

	(1) isSupervisor	(2) isSupervisor
elected_female_ratio	0.0868***	-0.148***
	(0.00832)	(0.0244)
female × elected_female_ratio	-0.0128	-0.0594***
	(0.00979)	(0.00966)
female	-0.0404***	-0.0190***
	(0.00286)	(0.00283)
age		0.00335***
		(0.0000304)
edu		0.0116***
		(0.000113)
Population Control	No	Yes
Year FE	No	Yes
County FE	No	Yes
Mean	0.0442	0.0442
Observations	503497	503497
Adj. R-square	0.0117	0.0647

Standard errors in parentheses

$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Outcome: Third Child & Sex Ratio

Table 3: 2SLS Birth Outcomes of City Council Elections

	(1) thirdChild	(2) thirdChild	(3) third_child_son	(4) third_child_son
elected_female_ratio	-0.295***	-0.0497***	0.0394	0.116
	(0.0232)	(0.0124)	(0.0600)	(0.0639)
second_child_son	-0.0292***	-0.0292***	-0.0632***	-0.0634***
	(0.00113)	(0.00111)	(0.00670)	(0.00669)
first_child_son	-0.0237***	-0.0234***	-0.0453***	-0.0452***
	(0.00105)	(0.00104)	(0.00657)	(0.00657)
Population Control	Yes	Yes	Yes	Yes
Year FE	No	Yes	No	Yes
County FE	No	Yes	No	Yes
Mean	0.0753	0.0753	0.554	0.554
Observations	293618	293618	22110	22110
Adj. R-square	.	0.0280	0.00664	0.00704

Standard errors in parentheses

$^{*}\ p < 0.05, ^{**}\ p < 0.01, ^{***}\ p < 0.001$

Outcome: Third Child & Sex Ratio

Interacted with subgroup: Whether first two child are both daughter.

Table 4: 2SLS Subgroup Birth Outcomes of City Council Elections

	(1) thirdChild	(2) thirdChild	(3) third_child_son	(4) third_child_son
elected_female_ratio	-0.0697***	0.0102**	0.0587	0.132
	(0.00483)	(0.00356)	(0.0729)	(0.0763)
both_daughter × elected_female_ratio	-0.369***	-0.383***	-0.0477	-0.0514
	(0.0367)	(0.0359)	(0.120)	(0.120)
both_daughter	0.182***	0.182***	0.101***	0.102***
	(0.00804)	(0.00798)	(0.0245)	(0.0245)
Population Control	Yes	Yes	Yes	Yes
Year FE	No	Yes	No	Yes
County FE	No	Yes	No	Yes
Mean	0.0176	0.0176	0.554	0.554
Observations	1261020	1261020	22229	22229
Adj. R-square	0.0253	0.0373	0.00775	0.00813

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Discussion

Increased female seats might reduce people' s willingness to pay for sons.

Model (1), (2)

- Gave up fertilizing 3rd child for those who already had 2 daughters
- Son preference weaken

Model (3), (4)

- Indicating behaviors of those who had conservative gender attitudes
  - "*insist to give a shot at third child*"
- Sex selection existed, and higher female representation didn' t abolish it.

Future Development

Future Development

Outcomes on Gender Attitudes

- Taiwan Social Change Survey

Other Influencing Channels

- Elected or Candidacy?

Potential Mechanisms

- Role-model effect
- Policy effect
    - Labor market outcomes
    - Pro-female policies