The Political Economy of Women's Health

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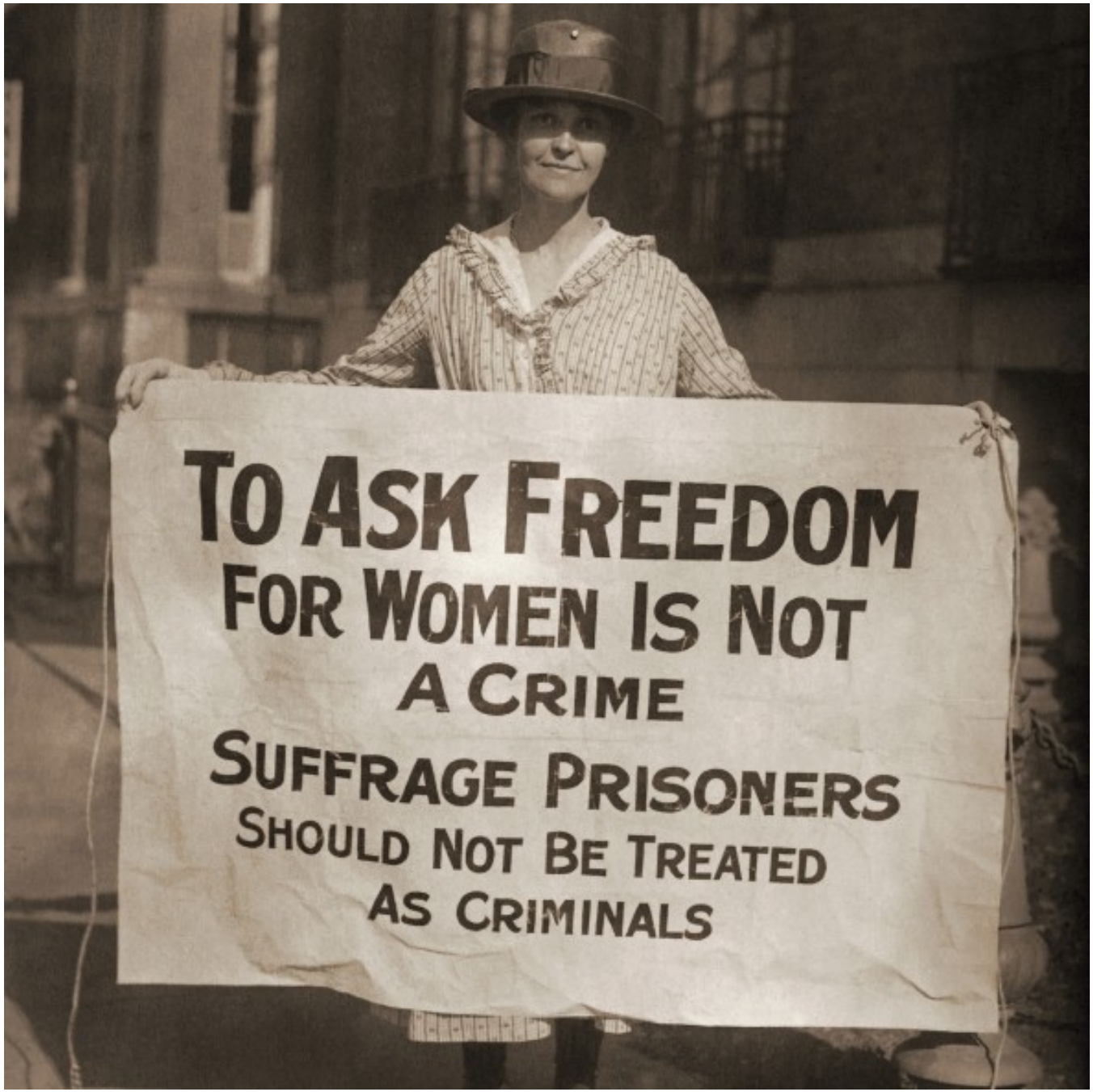
The Suffrage Movement









TO ASK FREEDOM
FOR WOMEN IS NOT
A CRIME
SUFFRAGE PRISONERS
SHOULD NOT BE TREATED
AS CRIMINALS


What a Woman may be, and yet not have the Vote
MAYOR
NURSE
MOTHER
DOCTOR or TEACHER
FACTORY HAND
What a Man may have been, & yet not lose the Vote
CONVICT
LUNATIC
Proprietor of white Slaves
Unfit for Service
DRUNKARD


WOMEN OF THE WORLD UNITE!


ORIGIN AND DEVELOPMENT
OF A SUFFRAGETTE.
At 15
a little
Pet.
At 20
a little
Coquette
At 40 not
married
yet!
At 50
A Suffragette.
VOTES FOR WOMEN

Layout- Two Papers

- (1) Large declines in maternal mortality can be achieved by raising women's political participation
  - Gender quotas in contemporary parliaments
  - Historical extension of the franchise to women
- (2) Economic performance is better under women legislators
  - Constituency data-close elections to India's state legislatures
  - Suggests no economic cost to prioritising women's health

Maternal Mortality and Women's Political Participation

Sonia Bhalotra (Essex) Damian Clarke (Santiago) Joseph Gomes (Navarra) Atheen Venkataramani (U Penn)

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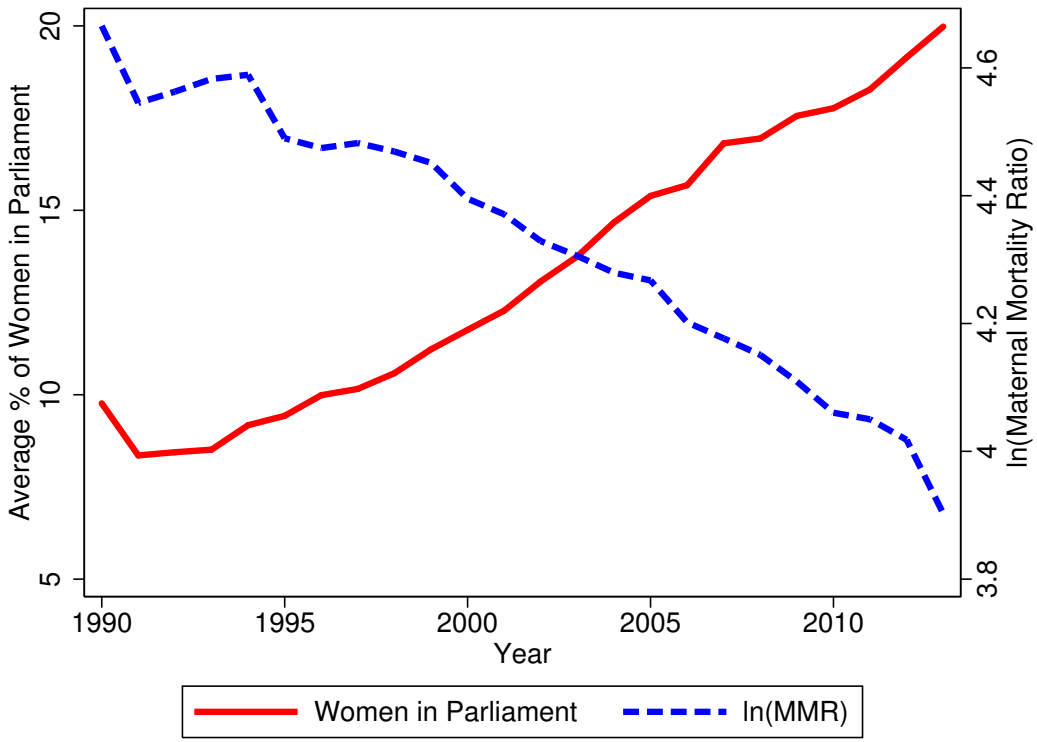
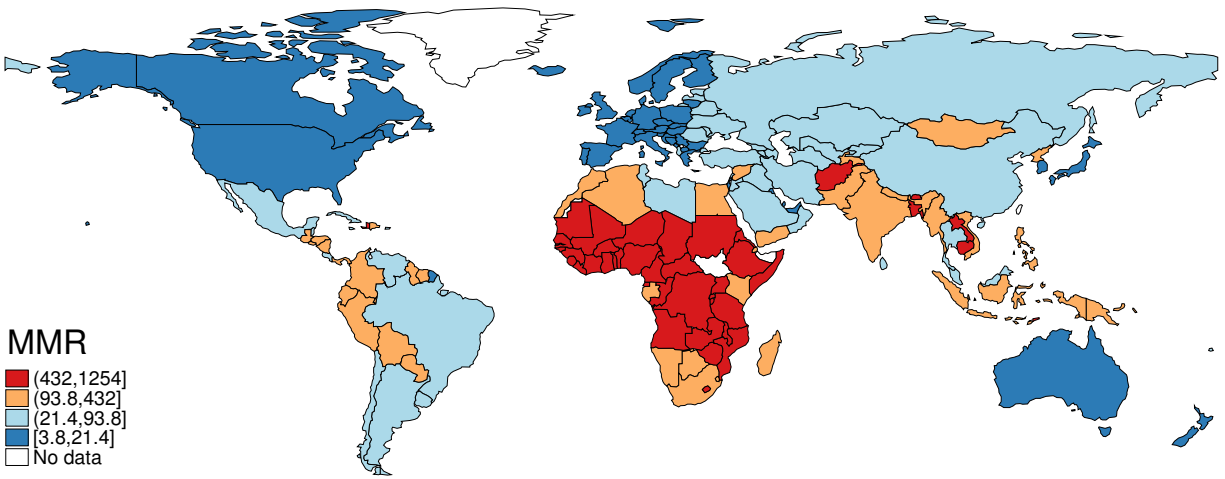
Global trends

Figure: Women in Parliament and Maternal Mortality



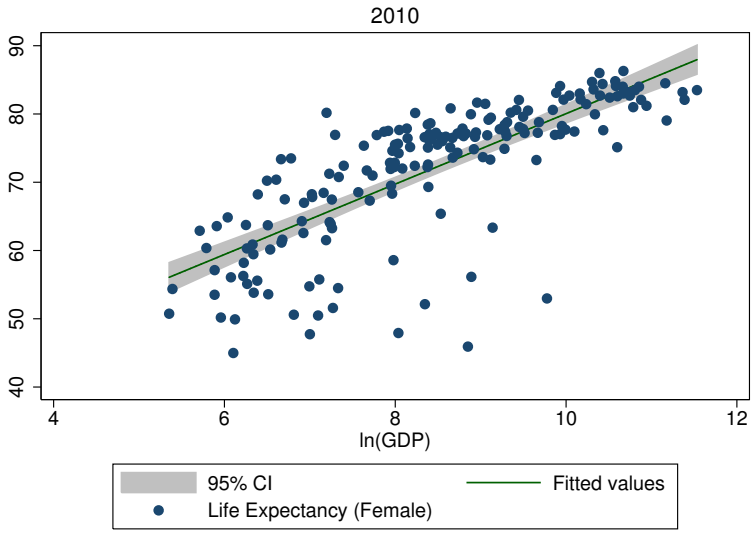
- Maternal morality fell by 44% in 1990-2015
- Share of women in parliament rose 10% to >20%
- We study whether these trends are causally related

Global distribution of maternal mortality ratio(MMR): Vast inequality

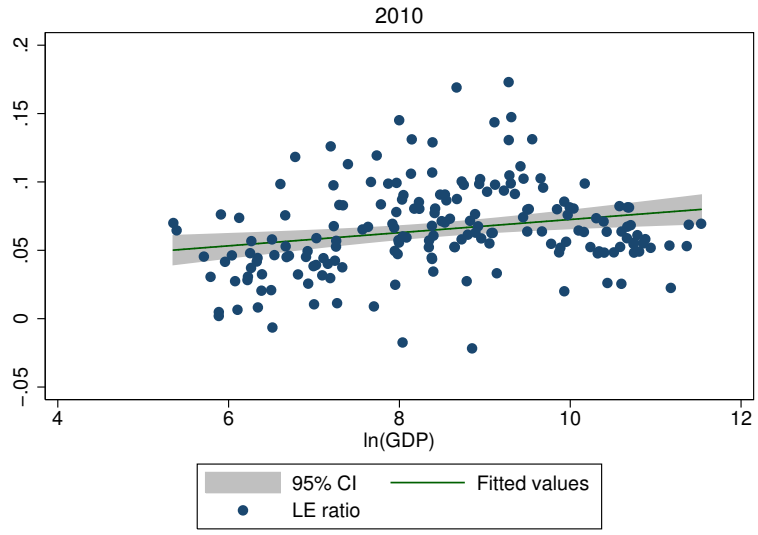


- 0.32m maternal deaths in 2015; tip of iceberg
- MMR in SSA today exceeds MMR a century ago in richer countries
- MDG not met (target 75%, actual 44%) but SDG more ambitious
- "Doubling down" with SDG highlights need for policy innovation

Role of income: limited



(a) Female LE and GDP



(b) Female LE advantage & GDP

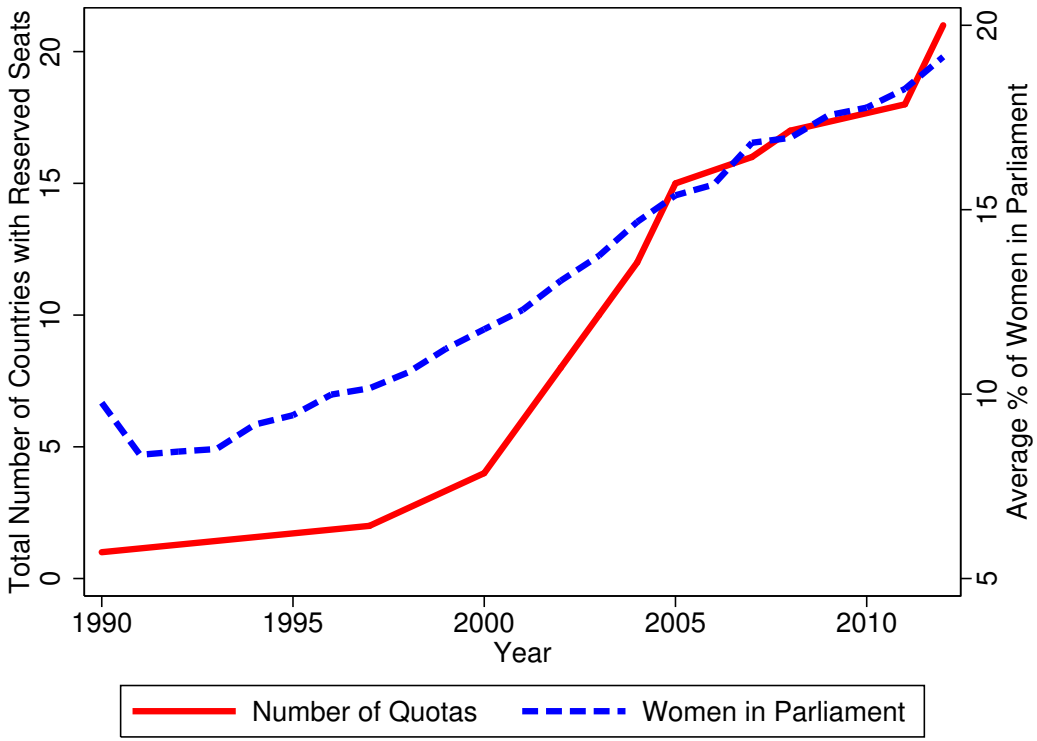
- Positive association of life expectancy and GDP
- Weak association of *gender gap* in life expectancy and GDP

Our Hypothesis: political will

- Large variation in MMR remains conditional on income
- Knowledge, technology and cost are not major barriers
- Instead: MMR has been a low policy priority
- Hypothesis: Raising share of women in policy making can improve this

Identification

Figure: Reserved Seats and Women in Parliament

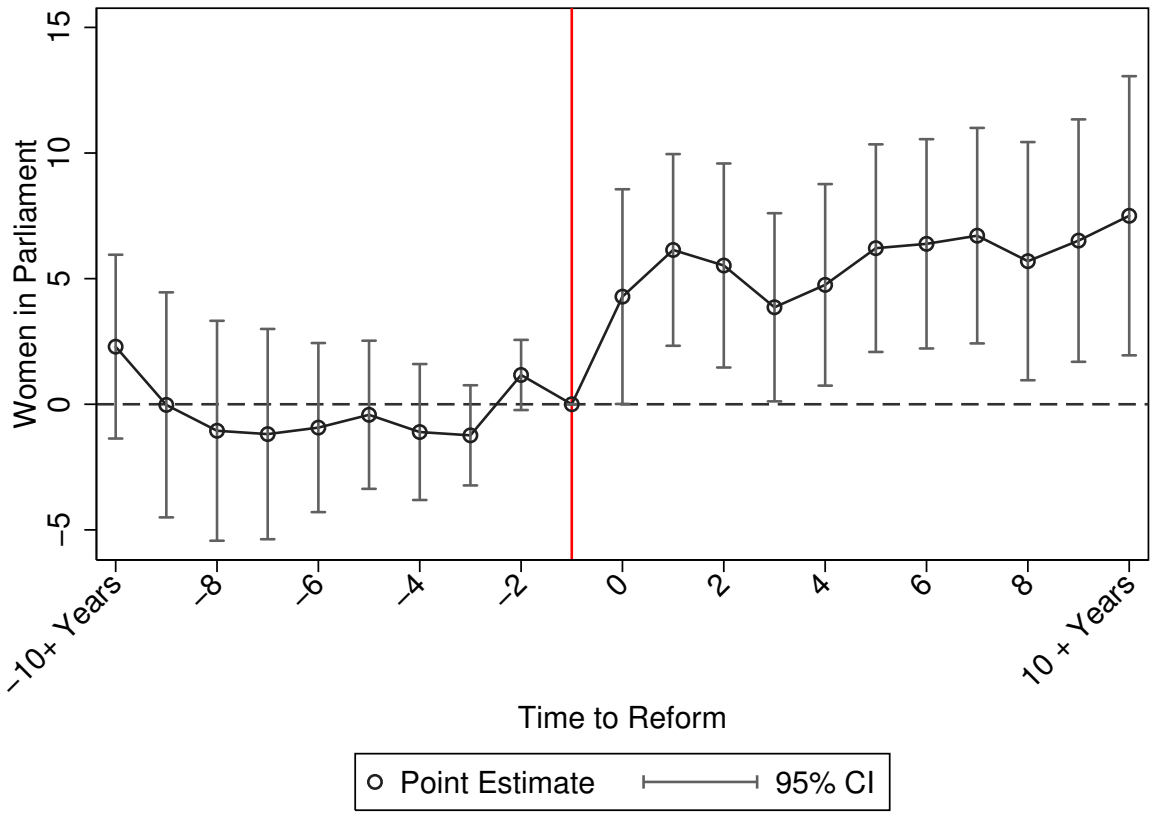


- Share of women in parliament rises smoothly, so hard to isolate
- Exploit abrupt legislation of quotas sweeping through LICs
- Wave of gender quotas since 4th World Conference on Women, Beijing 1995

Identification

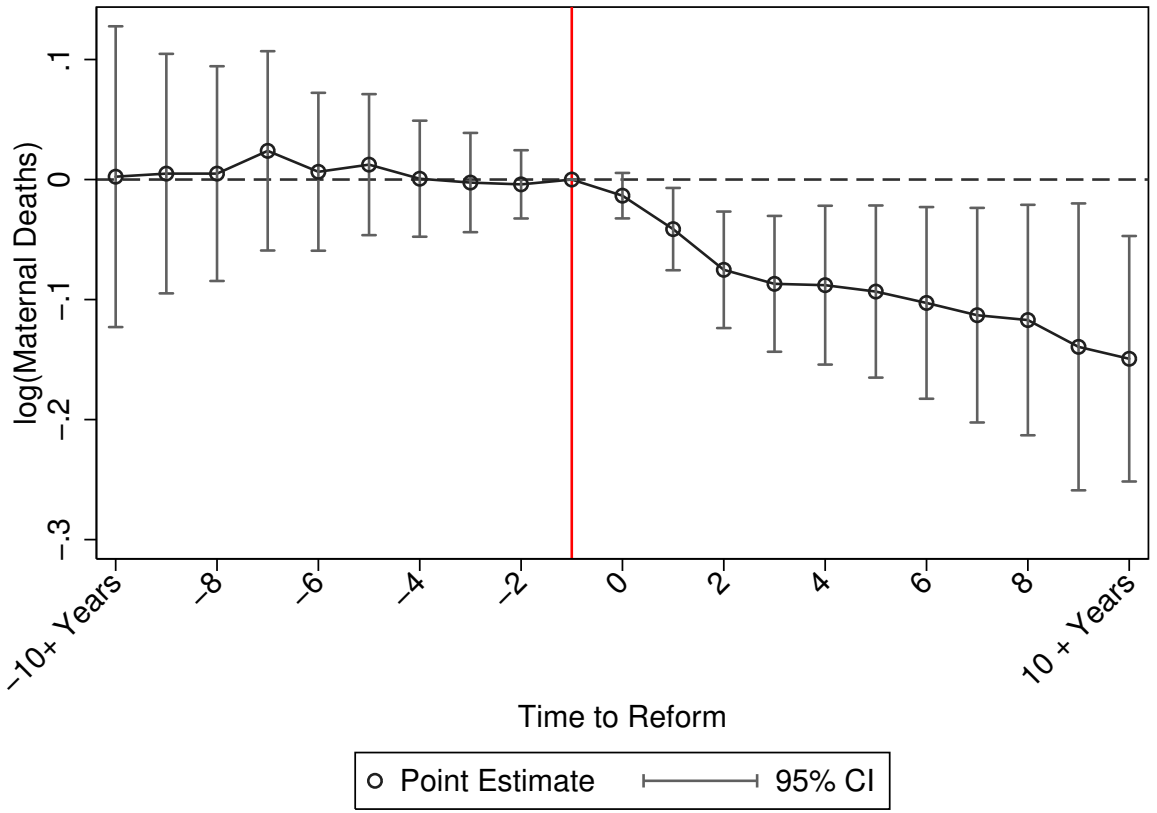
- Control for income, political regime type, democracy
- Scrutinize the assumption that quota implementation is quasi-random
  - Test for differential pre-trends
  - Control for predictors of quota legislation (Krook 2010)
  - Use IV and estimate IV bounds (Conley et al. 2012)

Event study: Gender quotas and the share of women in parliament (compliance)



- No differential pre-trends
- Women's share in parliament jumps discontinuously immediate upon the quota, by 5 ppt, 56%

Event study: Gender quotas and maternal mortality rates



- No differential pre-trends
- Coincident with passage of quotas- sharp MMR decline of 10%

MMR response to gender quotas – perspective

- Large relative to impact of GDP growth
  - A 10% decline in MMR would require a ∼20% increase in GDP
- Increasing in exposure duration
  - Ten years out, MMR is 16% lower
- Increasing in size of quota
  - Quotas of 20-30%: MMR decline 19.3%
- Benchmark: MMR declined 44% in the last 25y

Robustness

- IV: A 1 ppt $\Uparrow$ in women's share results in a 2% $\Downarrow$ in MMR
- IV Bounds (Conley et al. 2012) are meaningful: 0.5% to 3.5%
- Robust to:
  - Controls for predictors of quota legislation
  - Weighting by country population (Solon et al. 2015)
  - Level vs log MMR (Deaton 2010)

Alternative Interpretation

- Favoured interpretation: women policy-makers are more effective at targeting women's health
  - Consistent with gender differences in preferences (Neiderle 2010)
  - And models of political identity (Besley and Coate 1997).
- Alternative: women cause generalized improvements in health. But, we find-
  - No impact of gender quotas on male mortality in reproductive ages (placebo)
  - No significant impact on state health expenditure/GDP

Mechanisms- Current efforts to reduce MMR

- WHO recommendations-Grepin& Klugman 2013; Kruk et al. 2016
  - Trained birth assistance
  - Prenatal care
  - Aim is universal coverage (Lancet 2017).
- No consideration of political economy constraints in public health discourse

Mechanisms- Our new findings

- We estimate that passage of gender quotas leads to
  - A 7.4 ppt (9%) increase in skilled birth attendance
  - An imprecisely estimated 4.9 ppt (6%) increase in prenatal care utilization

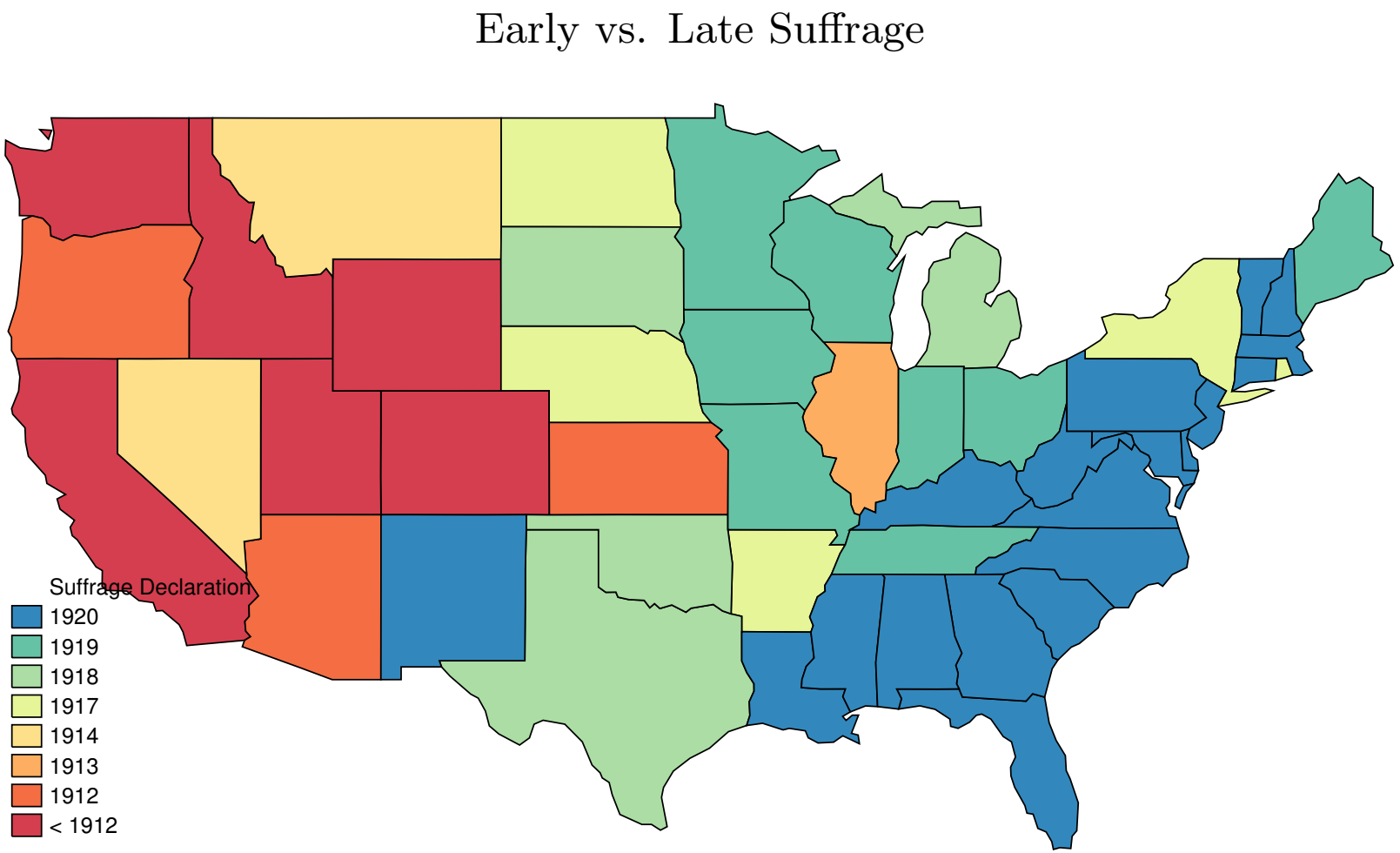
- Benchmark: Increase in skilled birth attendance achieved in last 25y was 12 ppt

Historical Extension of the Franchise to Women

Historical Variation in Women's Political Participation

- Early C20: variation in women's influence on policy primarily through suffrage (Miller 2008)
- Federal mandate extending the franchise in 1920
- Several states adopted it earlier (Lott and Kenny 1999)
- We investigate whether MMR decline was faster among early adopters.

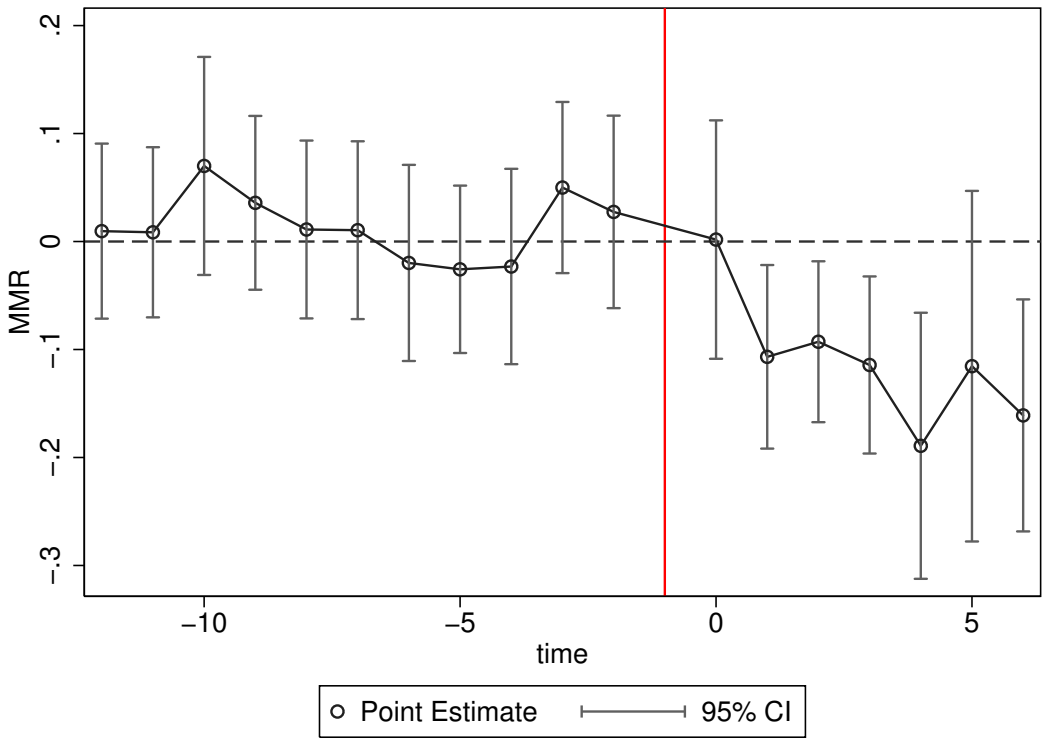
Enactment of women's suffrage in 1869-1920 across America



Historical Decline in Maternal Mortality

- First significant $\Downarrow$ in MMR not till antibiotics arrived in 1937
  - Thomasson & Treber 2008, Jayachandran et al. 2010, Bhalotra et al. 2017
- Structural break in MMR trend in all states, but at different rates
- Drop of 50% in 5 years, state variation 6% to 80%

Historical MMR decline was faster in states enacting women's enfranchisement earlier



- Level drop in MMR was 8.5% larger for early adopters
- Trend decline was 1.5% faster (10.4% compared to 8.9% p.a.)
- Strikingly similar to contemporary results
- No evidence of differential pre-trends

Robustness

- Control for predictors of early adoption (Miller 2008).
- Re-estimate for pneumonia mortality decline.
  - Pneumonia also declined with the antibiotic
  - But pneumonia affected both genders
  - We find no difference in rates of decline between early vs late suffrage adopters.

Summing Up-1

- Our findings suggest that neither increases in country income nor advances in medical technology are sufficient for the realization of potential improvements in maternal mortality
- We find large impacts from raising women's influence on policy-making
  - Cost of gender quotas may be low (Baskaran et al. 2017)
  - Already at scale
  - Addresses two SDGs at once
- Potentially widely relevant- MMR rising in the US (MacDorman et al., 2016)

Summing Up-2

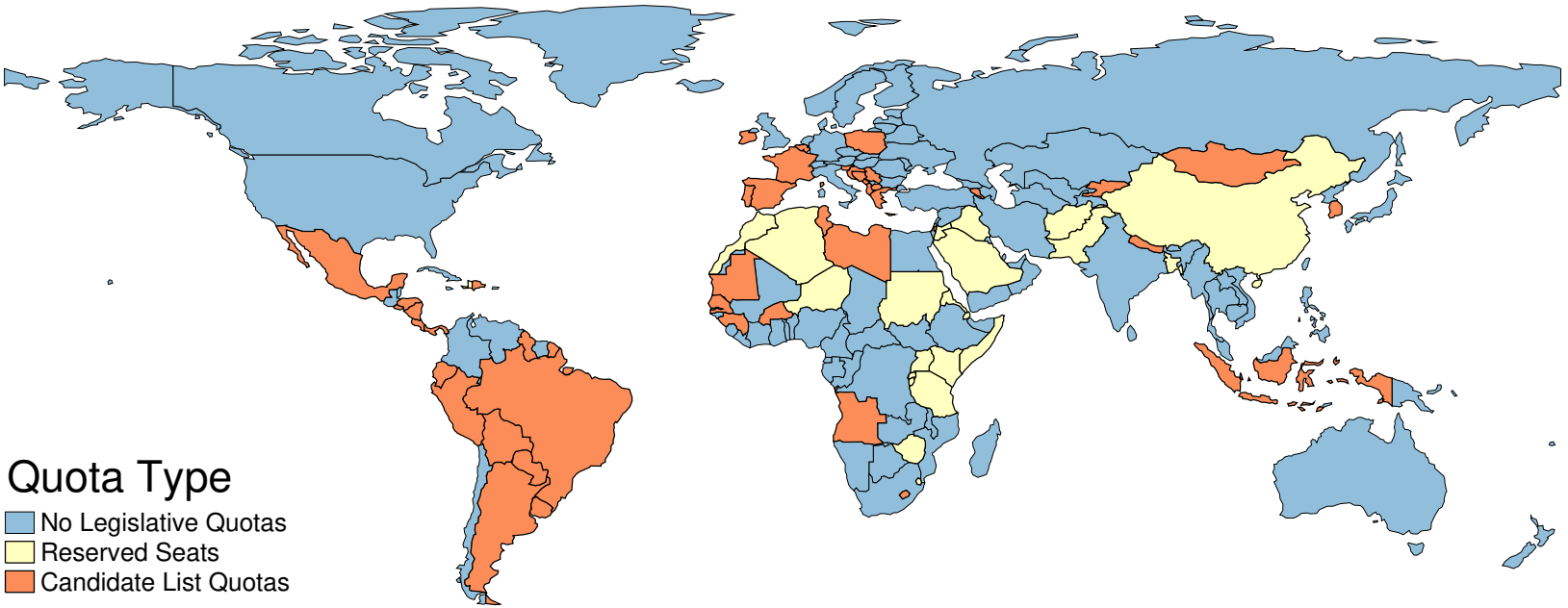
- Maternal mortality still high at 216 per 100,000 births
- Women's parliamentary share still low at 20%
- Thus considerable potential for further improvement

Summing Up-3

- Benefits of MMR reduction: intrinsic value, women's human capital, fertility, women's labour force participation and, thereby, next generation human capital
- Albanesi and Olivetti, 2016, 2014; Jayachandran and Lleras-Muney, 2009; Bhalotra, Venkataramani and Walther, 2017

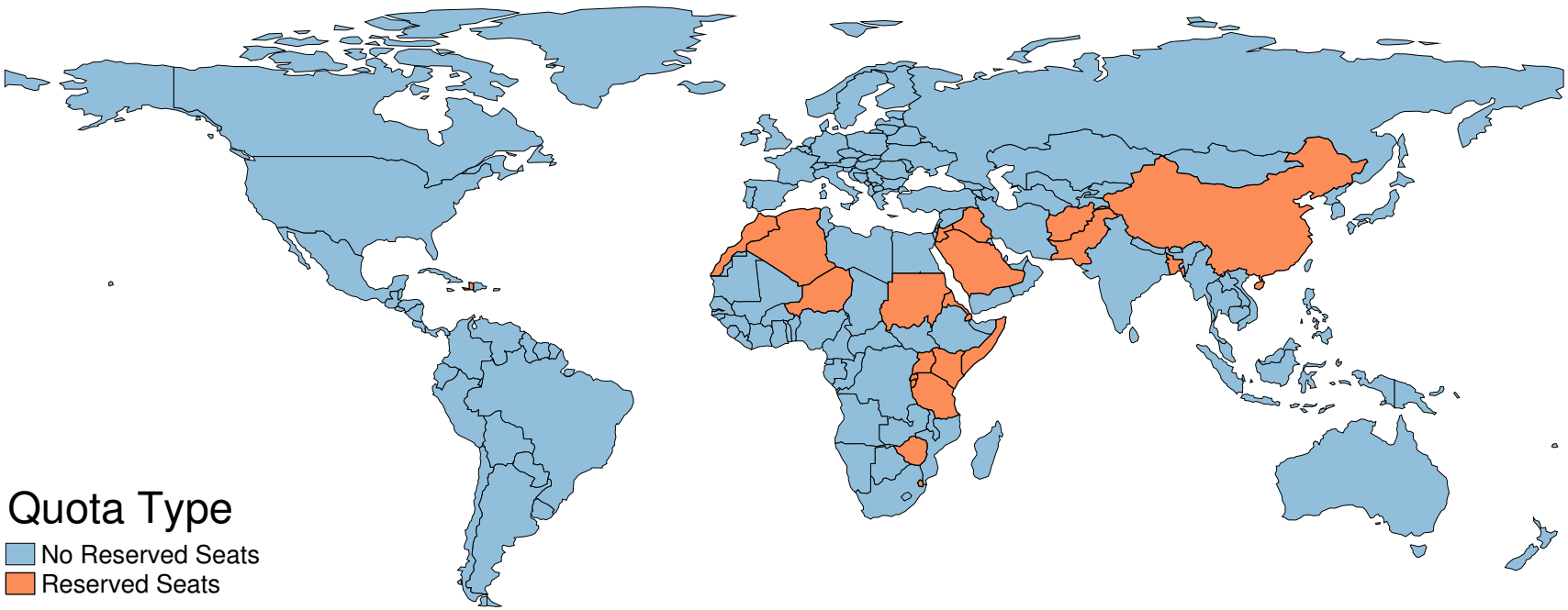
Appendix – Figures

Global distribution of gender quotas by type



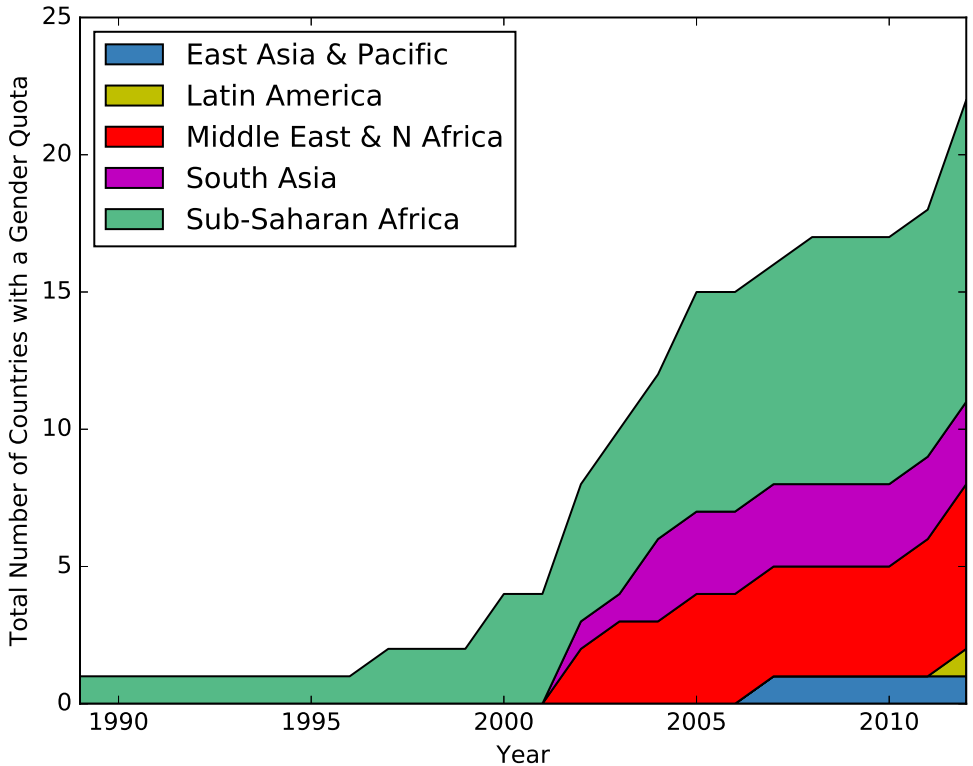
Source: quotaproject.org

Figure: Reserved Seat Quota Coverage: 1990-2015



NOTES: Source: Dahlerup (2005), quotaproject.org

Introduction of quotas for women in parliament through 1990-2015, by region



NOTES: Countries passing gender quotas since 1990: Afghanistan, Algeria, Bangladesh, Burundi, China, Djibouti, Eritrea, Iraq, Jordan, Kenya, Morocco, Niger, Pakistan, Rwanda, Saudi Arabia, South Sudan, Sudan, Swaziland, Tanzania, Uganda

Figure: Reserved Seat Quota Sizes

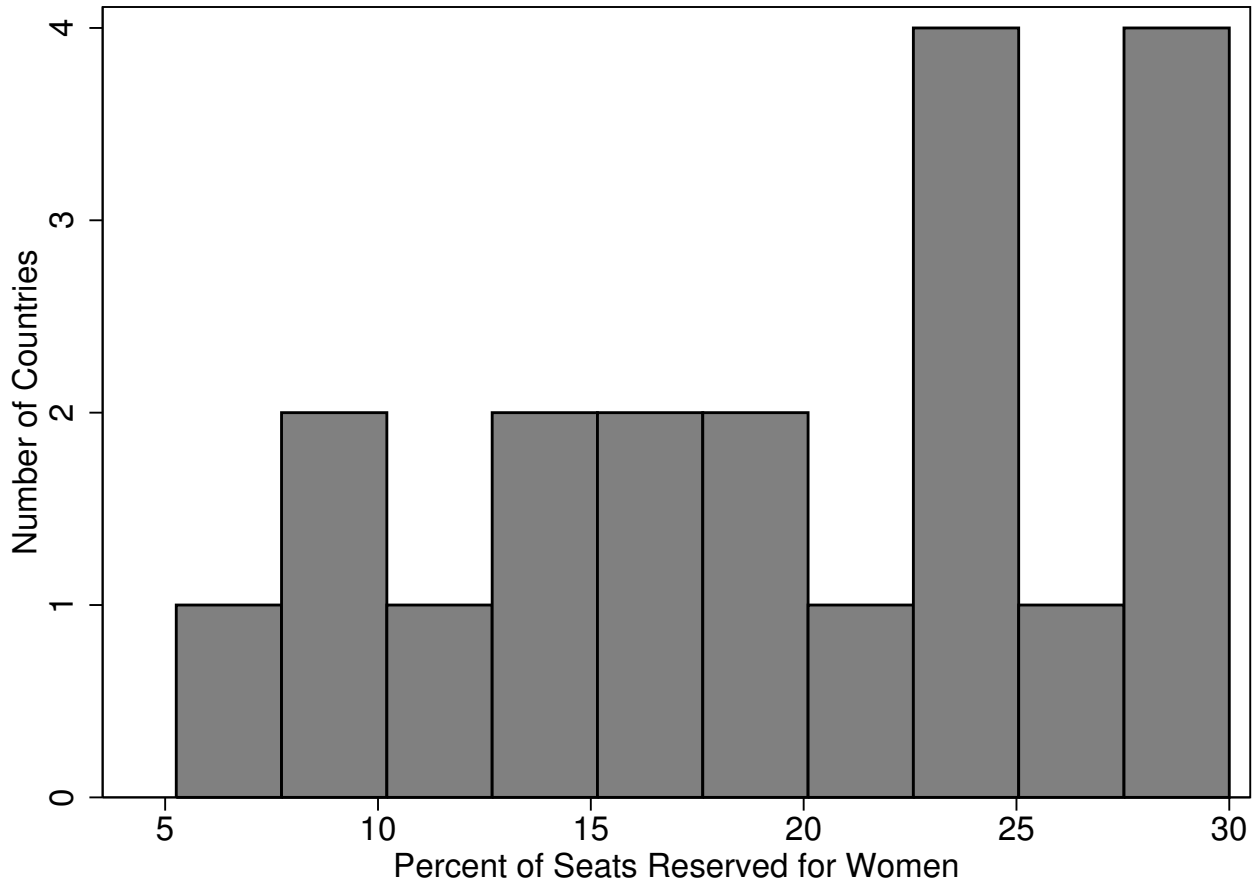
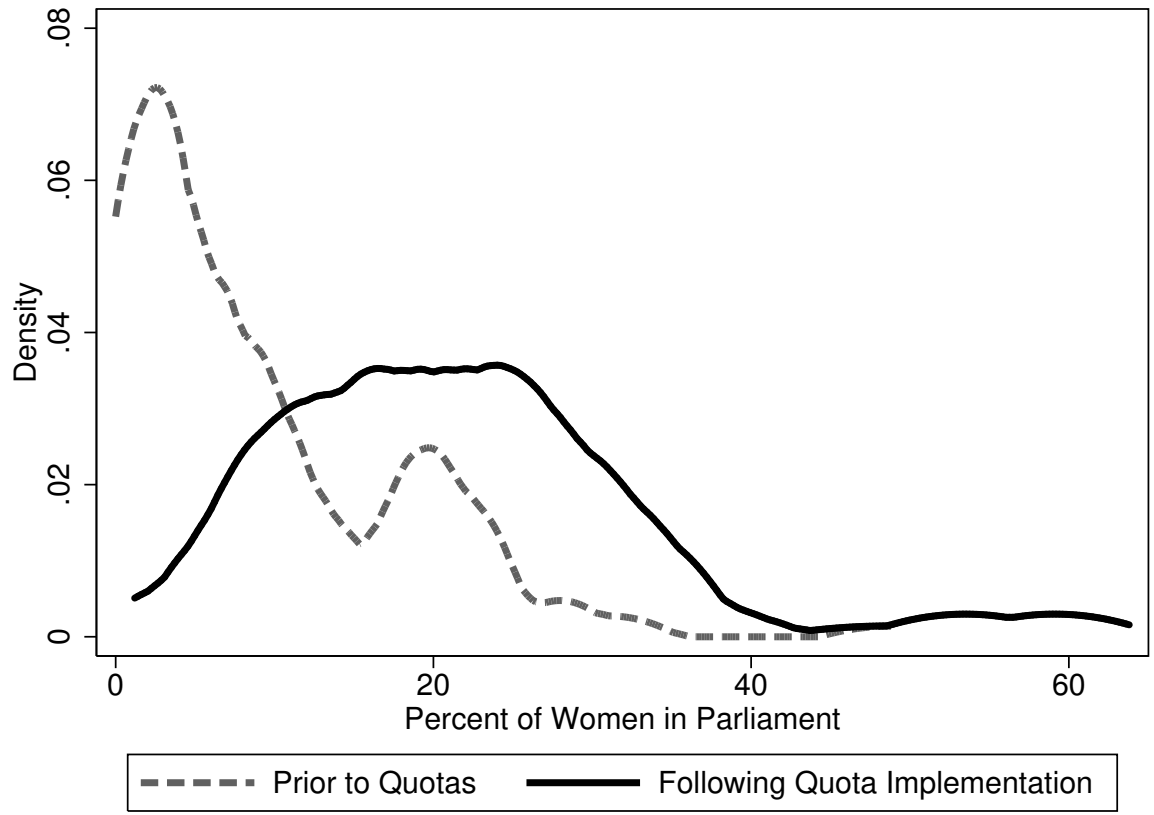
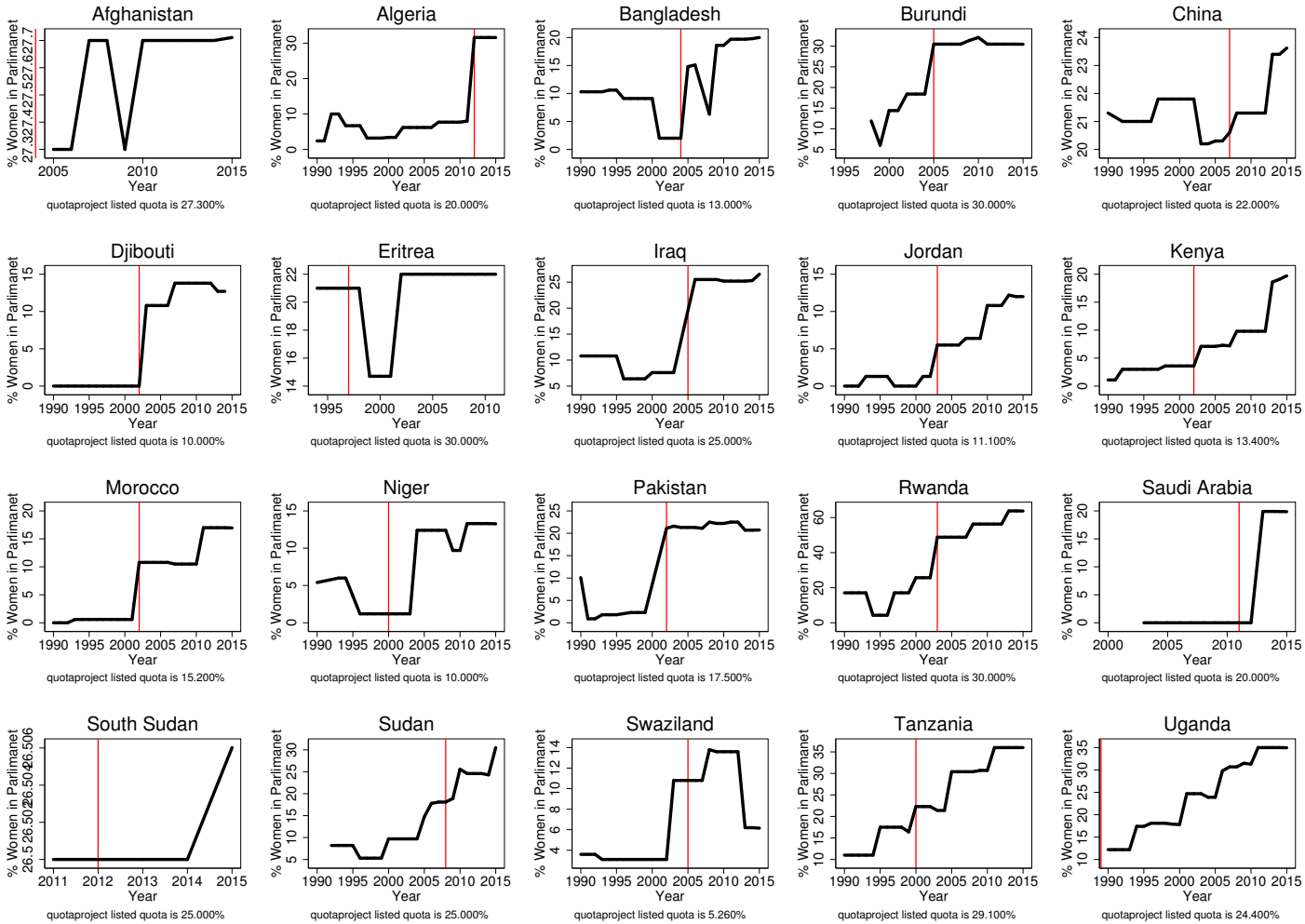


Figure: Proportion of Women in Parliament Before vs After Quota Legislation



NOTES: Density plots, sample of countries which adopted a reserved seat quota

Figure: Country-Specific Trends in Women's Share in Parliament: pre & post Reserved Seat Quotas



NOTES: Red vertical lines display the recorded date of the passage of a reserved seat quota for women in the national parliament

Table: Difference-in-differences estimates of the effect of Reserved Seats

	ln(Maternal Mortality Ratio)		% Women in Parliament	
	(1)	(2)	(3)	(4)
Reserved Seats	-0.083*	-0.104**	5.064**	4.888**
	[0.049]	[0.051]	[2.004]	[2.160]
Constant	7.093***	6.954***	7.619	17.046*
	[0.458]	[0.443]	[9.580]	[9.590]
Observations	3846	3229	3846	3229
R-Squared	0.586	0.606	0.471	0.494
GDP Control	Y	Y	Y	Y
Democracy Indicators		Y		Y

Each regression includes country and year fixed effects and clusters standard errors by country. A number of (small) countries do not have a democracy score from Polity IV. Refer to the paper for the estimates consistently using the sample where all covariates are available. * p<0.10; ** p<0.05; *** p<0.01.

Table: The Effect of Reserved Seats on Intermediate Outcomes

	Antenatal Care		Attended Births		Health Spending		Women's Education	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Reserved Seats	4.964	4.652	7.423	6.758	0.590	0.611	0.333	0.229
	[3.403]	[3.366]	[3.103]	[3.429]	[0.441]	[0.469]	[0.206]	[0.213]
Constant	22.790	14.098	32.614	25.919	12.840	12.932	5.484	4.877
	[28.998]	[31.225]	[24.569]	[29.323]	[2.413]	[2.510]	[1.942]	[1.914]
Observations	655	539	1157	983	3117	2729	3228	2758
R-Squared	0.447	0.531	0.339	0.359	0.207	0.233	0.584	0.603
GDP Control	Y	Y	Y	Y	Y	Y	Y	Y
Democracy Indicators		Y		Y		Y		Y

Identical difference-in-differences models are estimated as in Table 1, however dependent variables are now intermediate outcomes. Antenatal coverage and birth attendance refer to the percentage of coverage, are accessed from the World Bank databank, and are only available for a sub-sample of years. Health spending is measured as expenditure as a percent of GDP, and is produced by the World Health Organization Global Health Expenditure database. Women's education is provided by Barro and Lee (2012). Additional data descriptions are available in the online Appendix.

Table: The Passage of Reserved Seat Legislation

	No Country Fixed Effects			Country Fixed Effects		
	(1)	(2)	(3)	(4)	(5)	(6)
Overseas Development Assistance	0.002	-0.007	-0.021	-0.028	-0.023	-0.035
	[0.016]	[0.020]	[0.029]	[0.020]	[0.031]	[0.036]
Peace Keepers	0.002	0.015	0.018	0.004	0.017	0.020
	[0.001]	[0.008]	[0.010]	[0.001]	[0.008]	[0.009]
Change in Women's Rights	0.006	0.006	0.006	0.006	0.006	0.006
	[0.003]	[0.003]	[0.004]	[0.003]	[0.003]	[0.004]
Right Wing Executive	-0.001	-0.001	-0.001	-0.001	-0.000	-0.001
	[0.001]	[0.002]	[0.002]	[0.001]	[0.001]	[0.001]
Left Wing Executive	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002
	[0.002]	[0.002]	[0.002]	[0.002]	[0.003]	[0.002]
Years in Power	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Herfindahl Index	-0.001	-0.003	-0.003	-0.003	-0.004	-0.004
	[0.005]	[0.005]	[0.005]	[0.007]	[0.007]	[0.008]
Vote Share Opposition	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Transitioning Regime	0.006	0.007	0.008	0.007	0.009	0.010
	[0.005]	[0.005]	[0.006]	[0.006]	[0.007]	[0.008]
First Lag (ODA)		0.025	0.003		0.003	-0.009
		[0.030]	[0.030]		[0.029]	[0.028]
First Lag (peace keepers)		-0.015	-0.021		-0.015	-0.022
		[0.008]	[0.015]		[0.008]	[0.015]
First Lag (Δ Womens Rights)		0.001	0.000		0.001	0.000
		[0.002]	[0.002]		[0.002]	[0.002]
Second Lag (ODA)			0.038			0.018
			[0.029]			[0.024]
Second Lag (peace keepers)			0.004			0.006
			[0.007]			[0.008]
Second Lag (Δ Womens Rights)			-0.001			-0.001
			[0.004]			[0.004]
Observations	2783	2626	2470	2783	2626	2470
R-Squared	0.019	0.037	0.040	0.018	0.035	0.038

Estimated Equations

Reduced form effects of the passage of a gender quota, 156 countries, 1990-2015:

$$\begin{aligned} WomenParliament_{it} &= \alpha_0 + \alpha_1 Quota_{i,t-1} + \boldsymbol{X}'_{it}\boldsymbol{\alpha_x} + \mu_i + \lambda_t + \varepsilon_{it} \\ \ln(MMR)_{it} &= \beta_0 + \beta_1 Quota_{i,t-2} + \boldsymbol{X}'_{it}\boldsymbol{\beta_x} + \mu_i + \lambda_t + \eta_{it} \end{aligned}$$

- country i, year t. $Quota_{it}$ is 1 if a quota was in place in year t, 0 otherwise
- Standard errors clustered at country level
- Generalize to event studies, displaying pre and post quota trends

Table: Summary Statistics for Reserved Seat Analysis

	N	Mean	Std. Dev.	Min	Max
% Women in Parliament	3846	14.04	10.31	0.00	63.80
Maternal Mortality Ratio	3846	226.72	312.76	3.00	2820.00
Reserved Seats	3846	0.05	0.21	0.00	1.00
Male Mortality Rate (15-49)	3799	143.75	100.03	27.00	658.00
ln(GDP per capita)	3846	8.87	1.22	5.51	11.81
Polity IV Democracy score	3229	5.58	3.86	0.00	10.00
Percent of Pregnancies Receiving Prenatal Care	651	84.08	17.85	15.40	100.00
Percent of Births Attended by Skilled Staff	1152	83.22	24.31	5.00	100.00
Health Expenditure as a % of GDP	3111	6.24	2.39	0.72	17.10
Women's Education in Years	3091	8.38	3.26	0.54	15.30

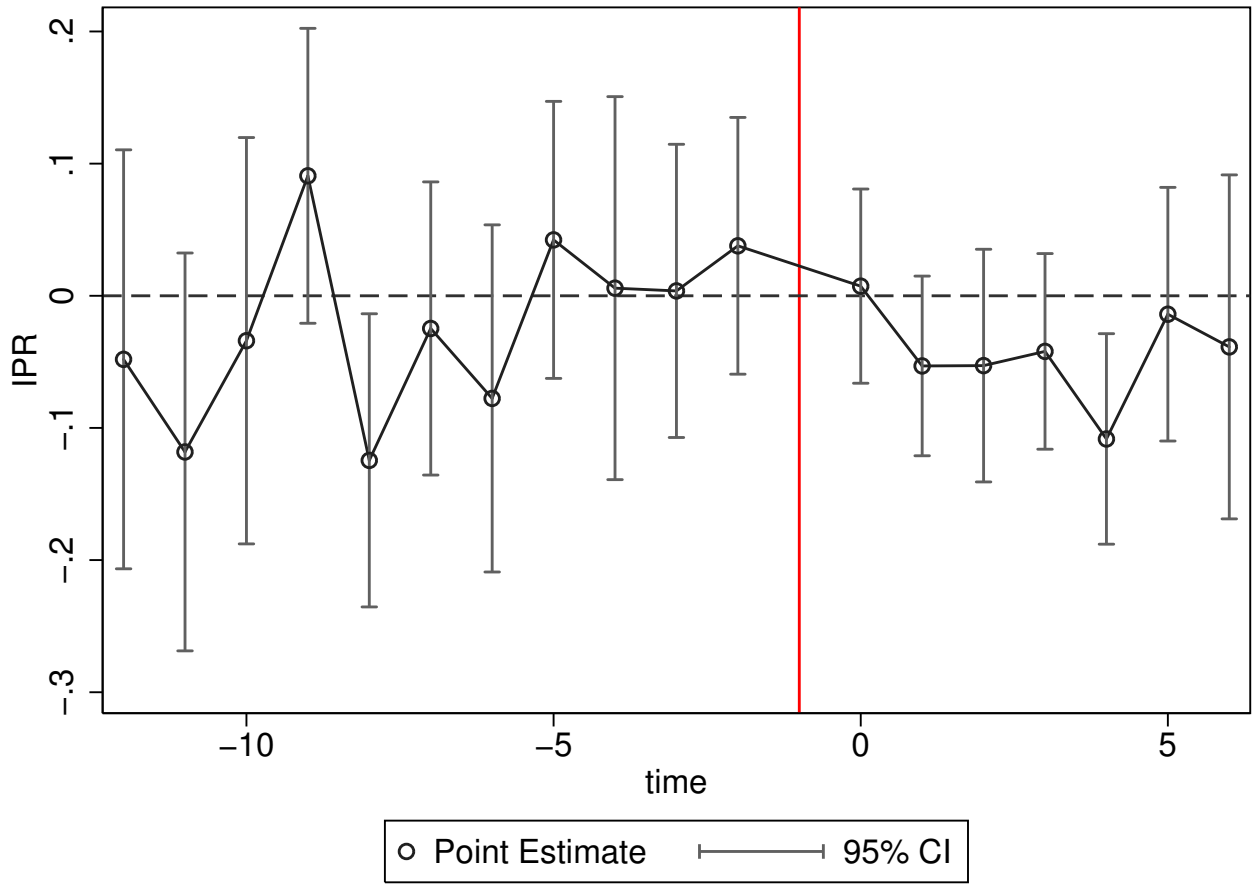
Table: Summary Statistics for Suffrage/Sulfa Analysis

	N	Mean	Std. Dev.	Min	Max
Maternal Mortality Ratio	868	5.40	2.06	0.70	12.10
Infant Pneumonia Mortality Ratio	868	1.03	0.34	0.36	2.36
Year of Birth	868	1934.37	5.34	1925.00	1943.00
Post Sulfa	868	0.39	0.49	0.00	1.00
Early Suffrage Adopter	868	0.60	0.49	0.00	1.00
Female Labour Force Participation Rate	868	0.29	0.07	0.17	0.40

Table: Difference-in-differences estimates of the effect of Sulfa Drugs

	(1) ln(MMR)	(2) ln(Pneumonia)
Constant	1.689	-0.046
	[0.012]	[0.015]
Post Sulfa	-0.092	0.009
	[0.030]	[0.022]
Early Suffrage × Post Sulfa	-0.085	-0.046
	[0.036]	[0.028]
Early Suffrage × Post Sulfa × Time	-0.015	-0.007
	[0.006]	[0.013]
Early Suffrage × Time	0.001	0.005
	[0.003]	[0.008]
Time	-0.023	-0.029
	[0.002]	[0.006]
Post Sulfa × Time	-0.089	-0.061
	[0.005]	[0.011]
Observations	868	868
R-Squared	0.951	0.780

Figure: Differential Impact of Sulfa on Pneumonia Mortality: Late vs Early Suffrage



Back

Placing our Contributions

- Experimental evidence (fairness, risk, competition)- Neiderle 2010
- Models of political identity- Besley and Coate 1997
- Evidence- women politicians favour policies aligned with preferences of women (and children)
- Our Contributions:
  - Broad brush analysis of gender quotas
  - We propose gender quotas as a tool for MMR reduction

Women Legislators and Economic Performance

Thushyanthan Baskaran (University of Siegen)
Sonia Bhalotra (University of Essex)
Brian Min (University of Michigan)
Yogesh Uppal (Youngstown State University)

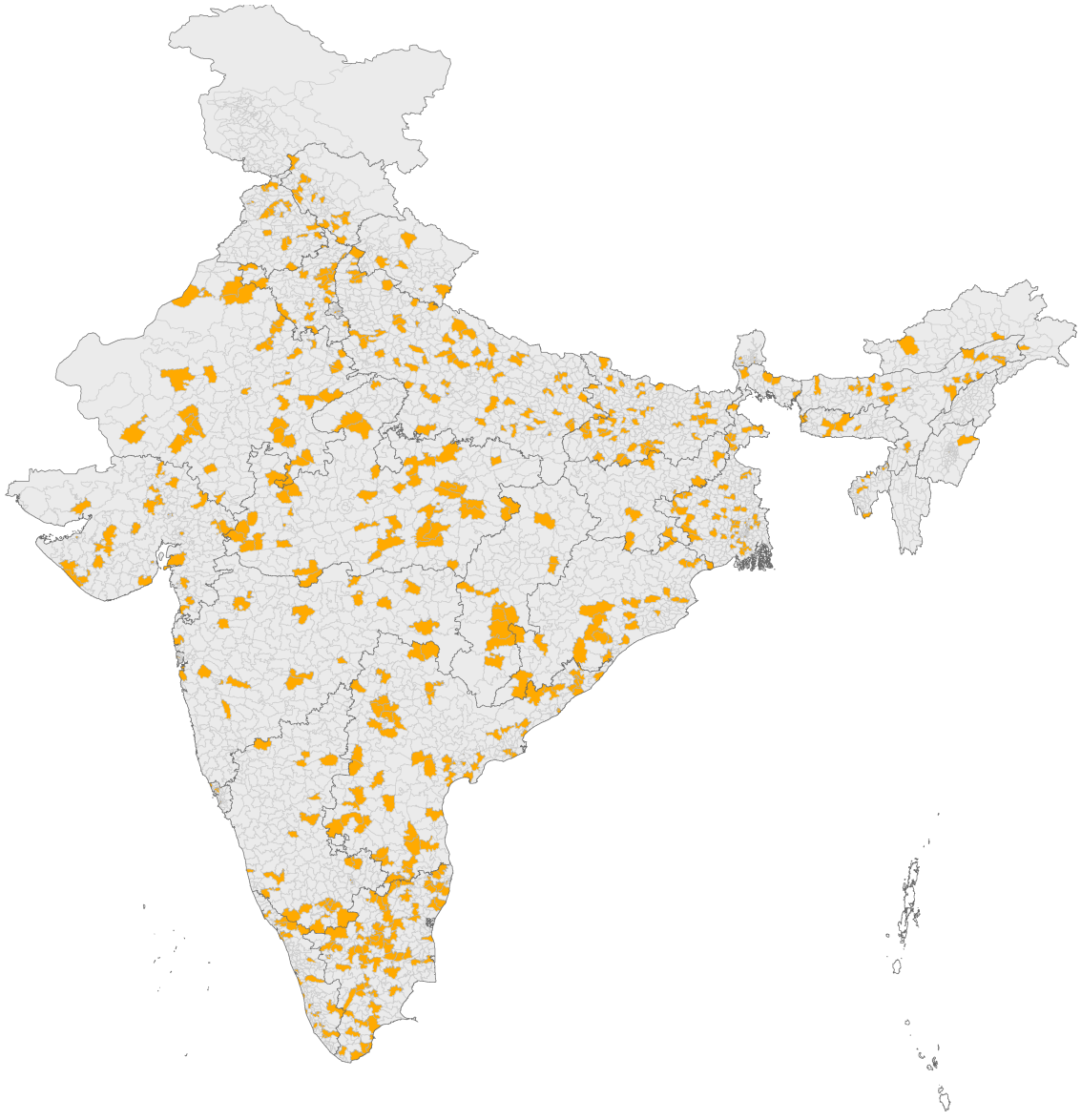
12 April 2018
EPCS, Rome

Women's Political Participation

Rising Share of Women in Political Office

- Substantial under-representation
  - Worldwide 23%, UK 32%, India 10%
- Phenomenal increase since 1990- doubling (global & India)
  - The feminization of politics is one of the most exciting political phenomena of our time.
  - Important to consider substantive impacts of widening representation.

Figure: Geographic Distribution of Female Legislators: 1992-2008.



Women Politicians Change Policy Choices

- Legislator gender affects **composition** of public spending
- Consistent with women & men having different preferences: lab experiments, voter surveys

- However, no evidence for economic activity, the rising tide thought to lift all boats.
- Lurking suspicion that women leaders may compromise growth given they favour redistribution.
  - Edlund and Pande 2002; British Election Survey 2011

Women on Corporate Boards

- Ambiguous/ mixed results for economic performance
  - Gagliadurci & Paserman 2014- Germany- no impact once sorting is accounted for
  - Ahern and Dittmar 2012-Norway quotas- deterioration of performance- women less experienced.
- Our approach avoids candidate selection, and the distortions introduced by quotas

Data

- Elections to India's state legislative assemblies
- Electoral data- 4265 constituencies, 1992-2012, spanning 4 elections
- Map satellite imagery of night luminosity to constituencies to measure economic performance (Henderson et al. 2012)

Figure: Level of luminosity in India in 1992.

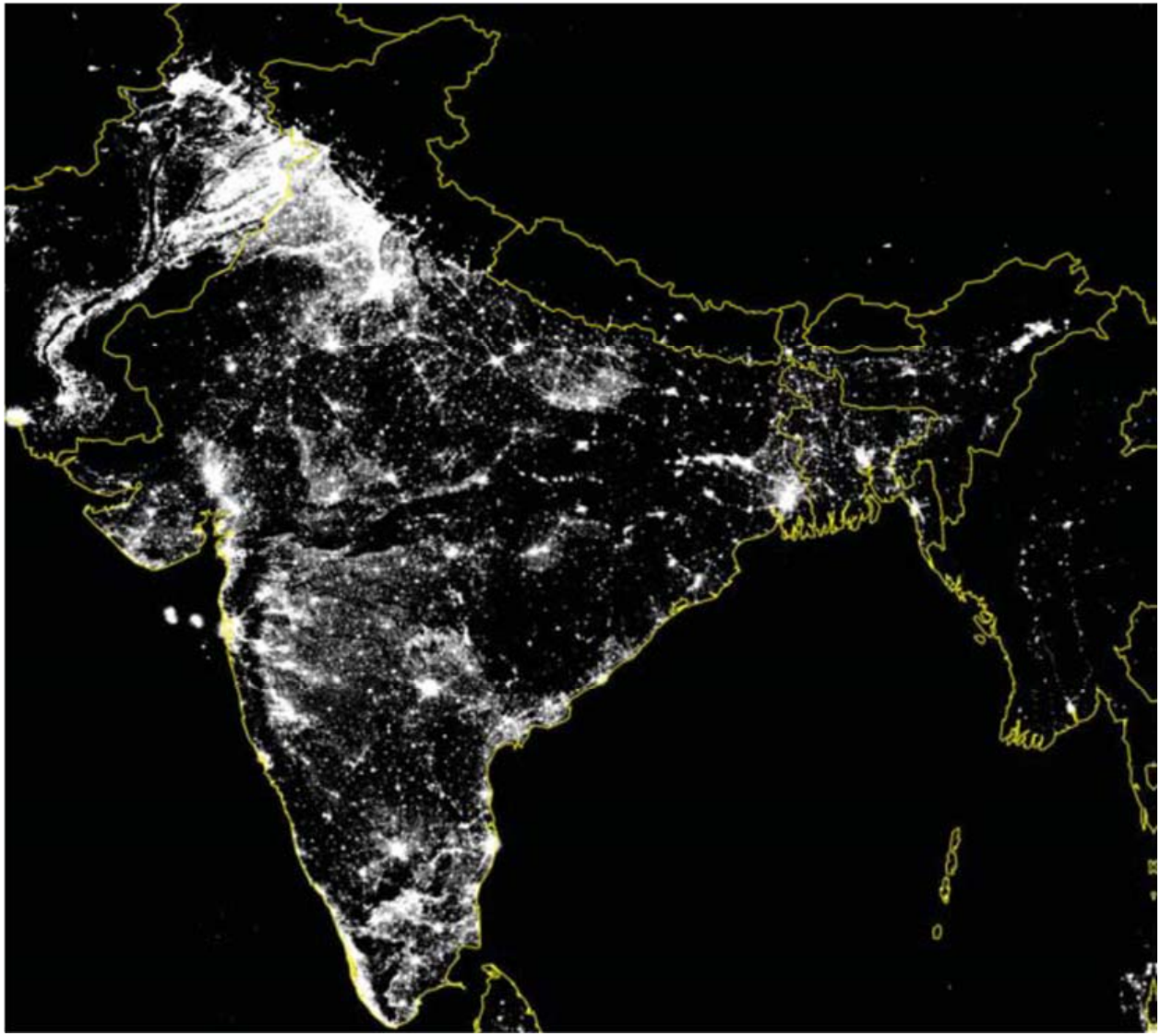
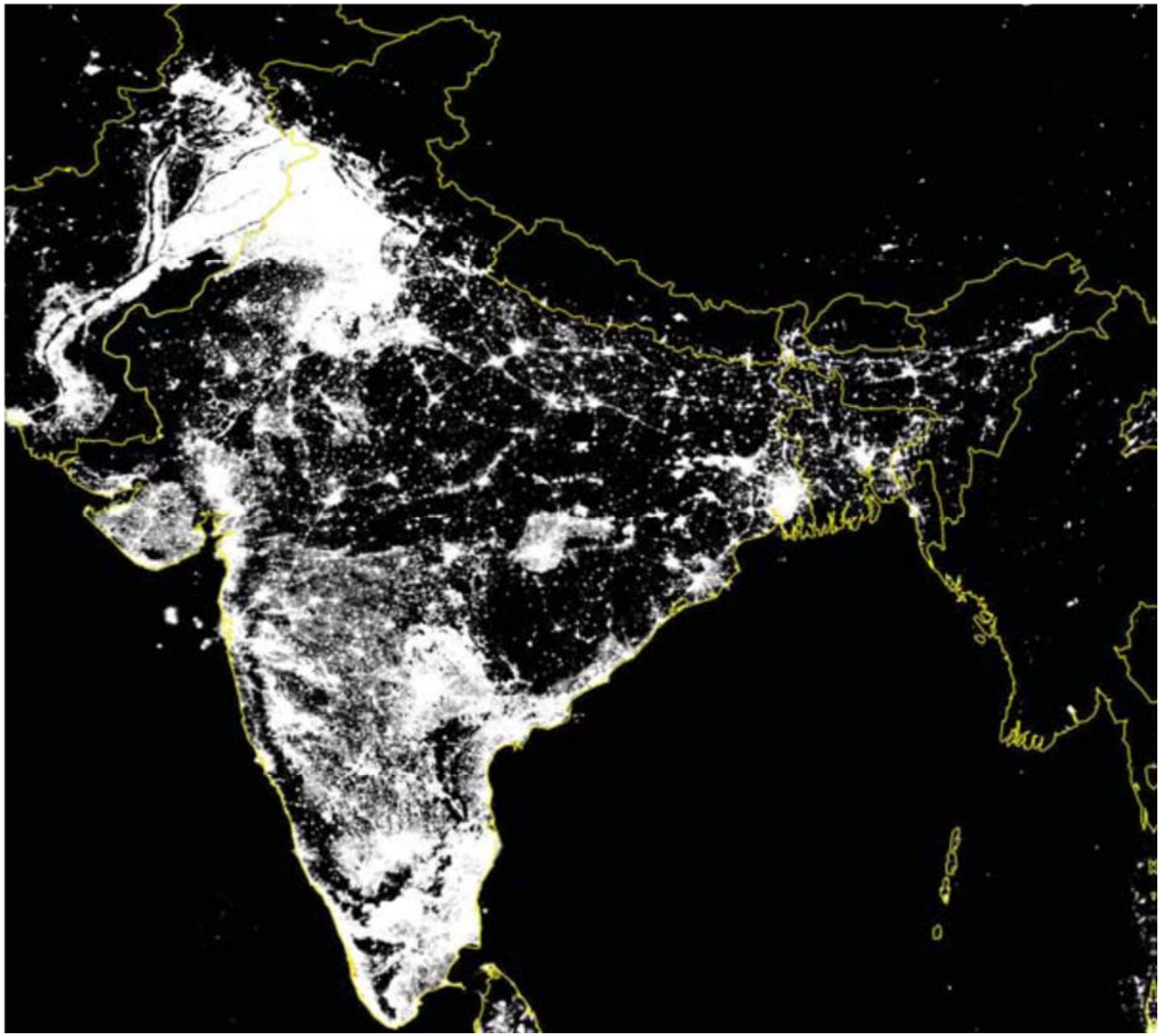


Figure: Level of luminosity in India in 2009.



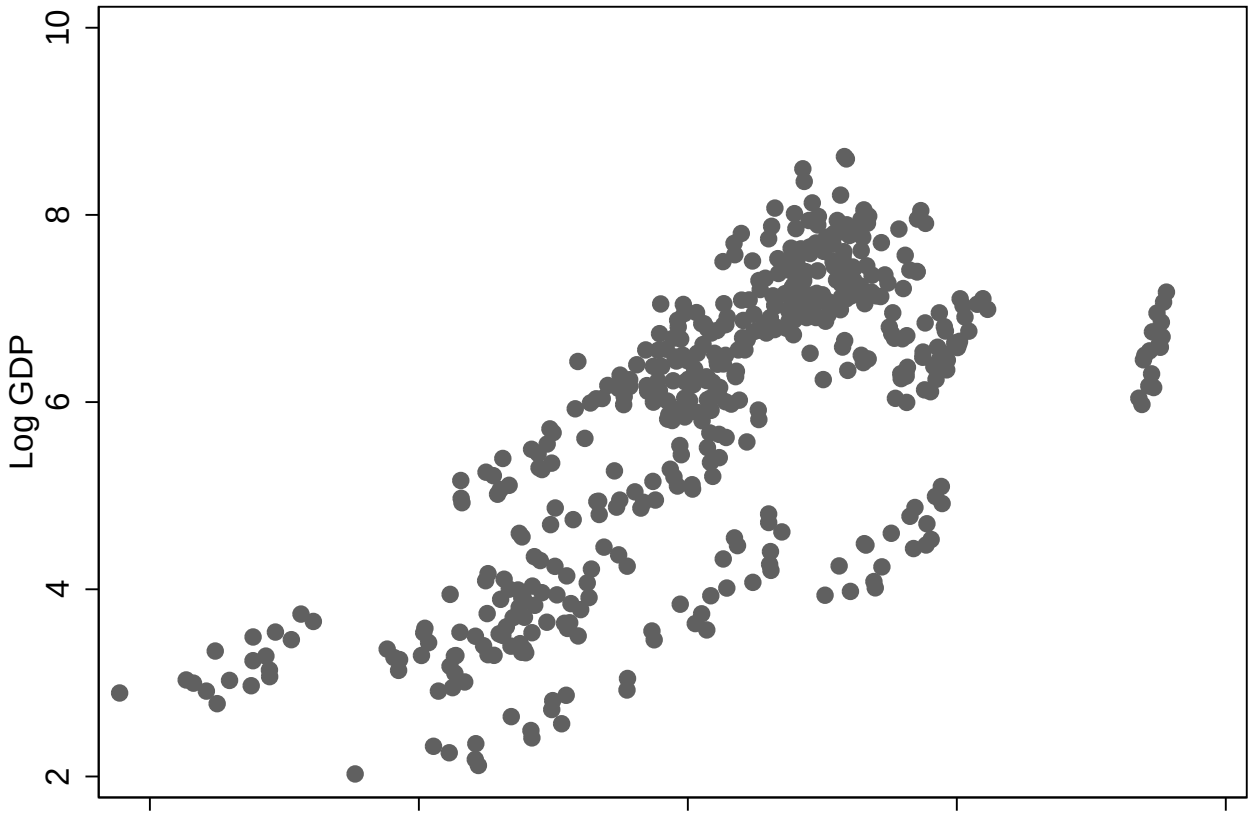


Figure: Scatter of GDP against Night Light Luminosity: State data Note: Log(Light/Area) is the natural log of total light output of a state in a given year divided by its geographical area. Data for 1992-2009.

Empirical Strategy- RD

- Design challenge: Voter preferences are likely to be different in places where women win
- Need to isolate legislator preferences from voter preferences
- Use RD design on close elections between men and women- so gender of the winner is quasi-random (Lee 2008)
- Analyze mechanisms- corruption, public infrastructure, strategic vs intrinsic motivation

RD Estimator

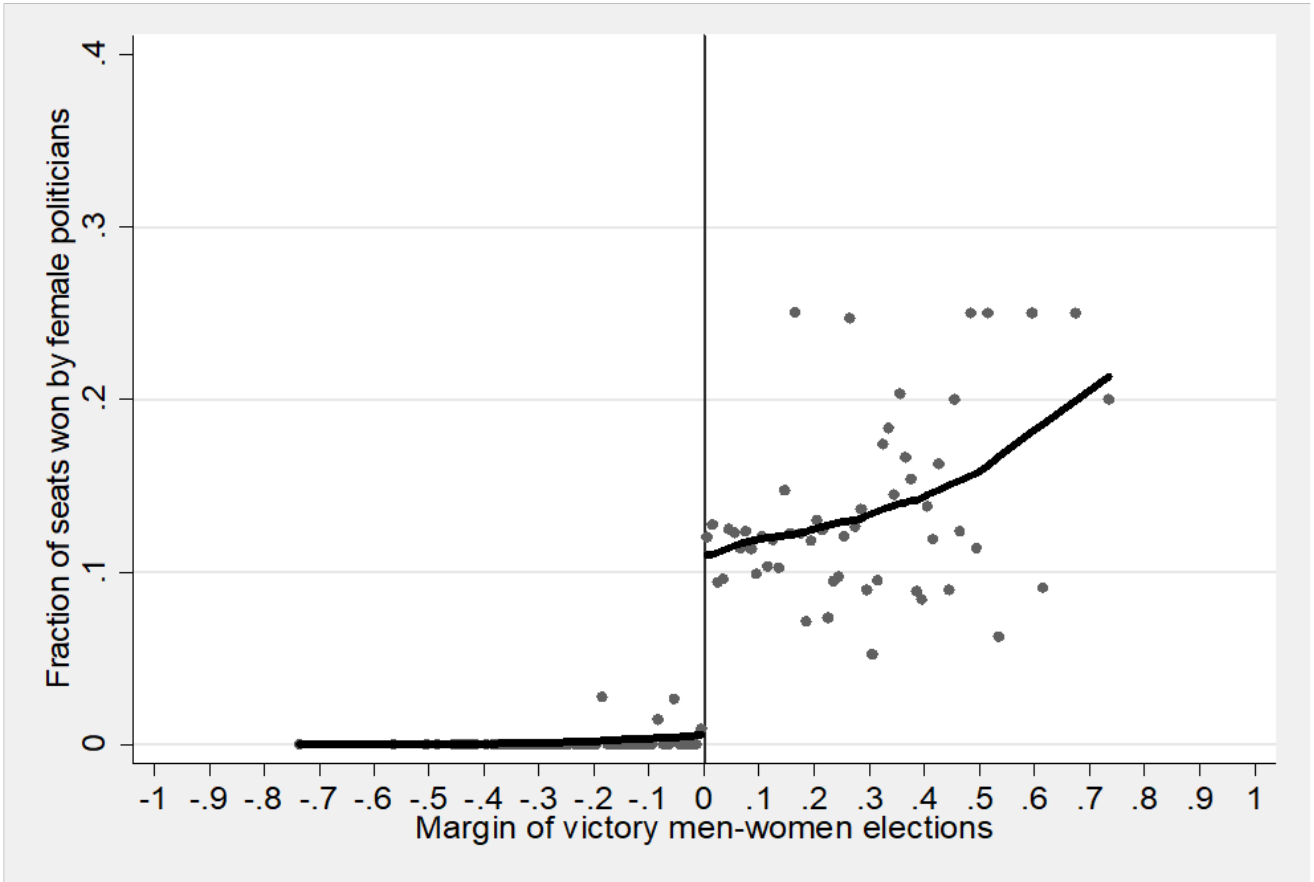
- The estimated equation is

$$y_{ist} = \alpha + \tau WomanLegislator_{ist} + f(Margin_{ist}) + \epsilon_{ist} \qquad (1)$$

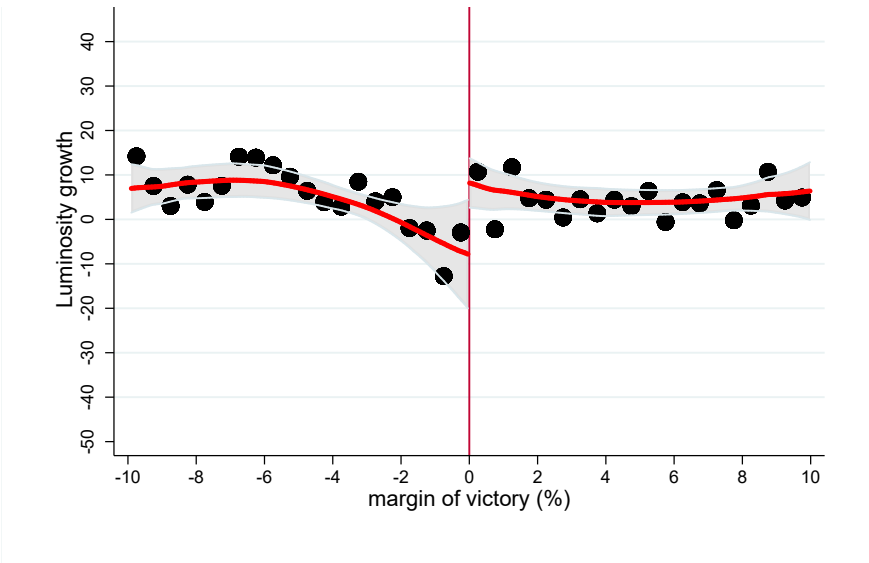
$$WomanLegislator_{ist} = \begin{cases} 1 & \text{if } Margin_{ist} > 0 \\ 0 & \text{if } Margin_{ist} \leq 0 \end{cases}$$

- y_{ist} is the growth of light in constituency i in state s during election term t
- Local linear regressions (Imbens and Lemieux, 2007) restricting sample to an optimal bandwidth around the discontinuity (Imbens and Kalyanaraman, 2011).

Figure: Discontinuity [jump] in winning chances when the victory margin is small.



Main Result: Legislator Gender and Luminosity Growth



- Quasi-random assignment of a female (rather than a male) winner to a constituency increases economic growth by 2 ppt p.a.
- Given average growth in sample period of 7%, the growth premium associated with having a female legislator is 25%

Table: Legislator Gender and Luminosity Growth

	(1)	(2)	(3)	(4)	(5)
	Growth of Light$_{t+1}$				
	Local Linear				Local Quadratic
	IK (h)	h/2	2h	IK (h) with Covariates	IK (h)
Female MLA$_t$	15.25**	16.97*	8.52**	10.53**	17.11*
	[6.12]	[8.96]	[3.79]	[4.40]	[9.42]
R^2	0.03	0.03	0.02	0.75	0.03
N	584	316	980	428	584
Bandwidth	6.68	3.34	13.36	6.68	6.68

Specification Checks

- Pre-determined covariates do not jump at threshold
  - Electoral and demographic characteristics of constituency
  - Lagged outcomes
- McCrary density test for sorting at the zero victory margin
- Control for party of legislator
- Vary bandwidth, rank of women, remove outliers

Spillovers to neighbours

We have shown women are more effective than men at raising growth in their own constituencies.

- We tested for offsetting negative spillovers to contiguous constituencies
- Found none- hence women raise economic performance *overall*.
  - Dep variable changed to growth averaged over neighbours of constituency j (mean of 6).
  - Independent variable is gender of the legislator in j.
  - Imprecisely determined positive effect- consistent with yardstick competition between neighbours (Besley and Case, 1995) and infrastructure spillovers.

Mechanisms 1- Corruption tendencies

- Data: Candidates required to file affidavits which include pending criminal charges
  - 10% women legislators are 'criminal' vs 32% men.
  - This explains 25% of the estimated performance gap (cf Prakash et al. 2017)
- Women appear to have weaker preferences for criminal behaviour
  - Criminal behaviour is correlated with risk-aversion, patience, fairness which exhibit gender differences
  - Andreoni and Vesterlund, 2001; Eckel and Grossman, 2008; Fletschner et al., 2010

Mechanisms 2- Corruption in office

- Once elected, politicians are s.t. a re-election constraint
- Or office may ennoble (Brennan and Pettit, 2002; Benabou and Tirole, 2003)
- We estimate rent-seeking indicated by net asset growth in office (Fisman et al. 2014)
- We estimate that this is 10 ppt p.a. lower among women

Mechanisms 3- Public infrastructure provision

- Administrative data on federally funded but locally implemented village road building scheme from 2000
- No difference in number of road contracts won by women
- But share of incomplete road projects is 22 ppt lower for women
  - Road construction has higher returns for men (Asher and Novosad 2018)
  - Our result shows that women are not only good at serving the interests of women.

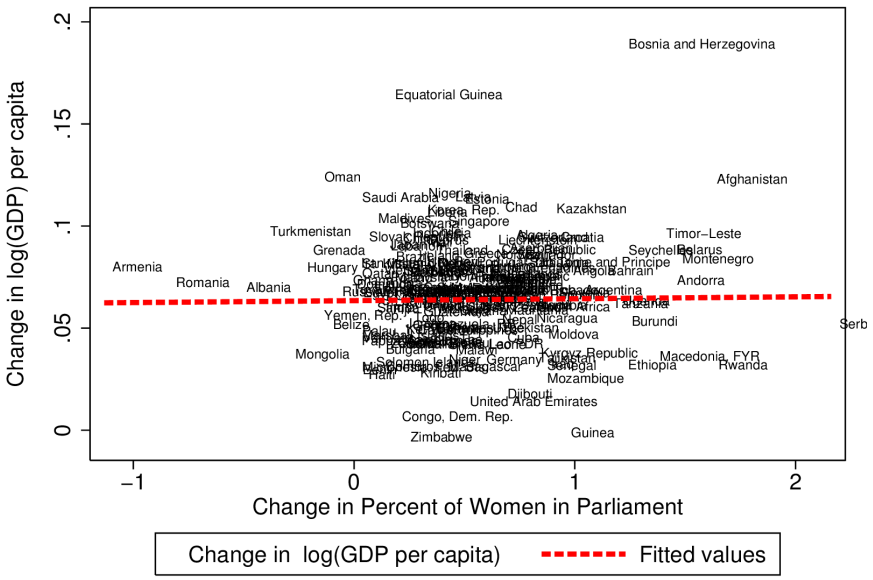
Mechanisms 4- Political opportunism

- Politicians can be opportunistic or intrinsically motivated
  - Mani and Mukand 2007; Cole 2009 vs Brennan and Pettit 2002; Benabou and Tirole 2003
- Opportunistic (electoral) incentives sharper in swing constituencies
- Define swing if previously won by a <5% margin
- Find women only more effective in non-swing constituencies

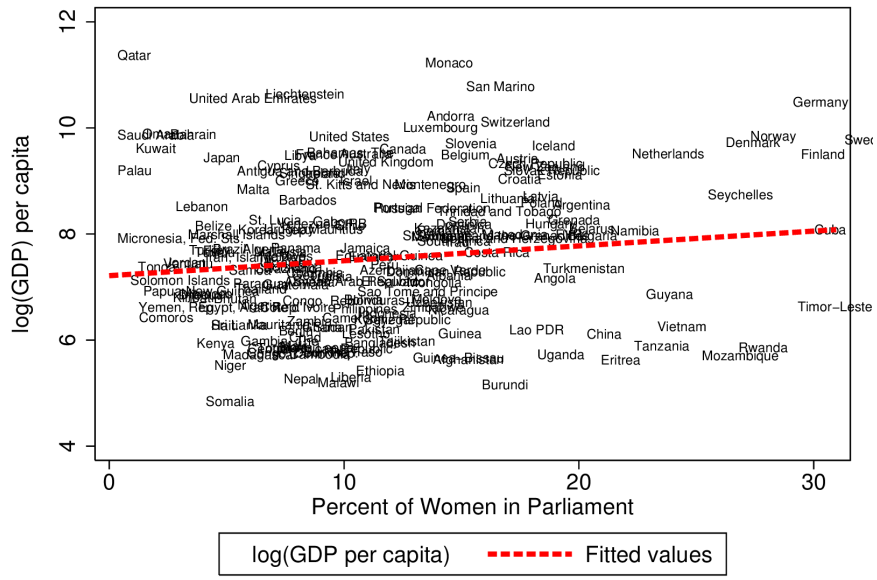
Conclusions

- Women raise economic performance in their constituencies, and overall
  - This result is not apparent in the raw data because of selection
- Mechanisms indicated are lower corruption, higher intrinsic motivation and efficacy in completing infrastructure projects
- To the extent that opportunities for corruption are greater in less developed countries, women may be especially effective relative to men in these countries

Cross-Country Scatter: Women in Parliament & Growth



Averages for 1961–2012. Women in parliament is measured by WDI, ICPSR and the UN.

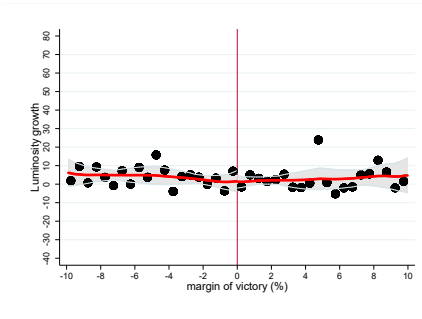


Averages for 1961–2012. Women in parliament is measured by WDI, ICPSR and the UN.

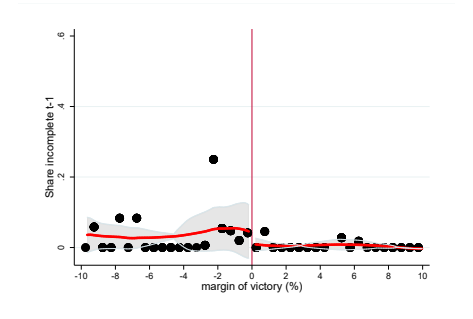
Figure: Raw scatter- does not account for selection

Balance in pre-determined covariates I

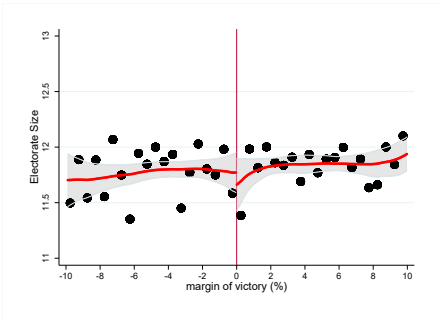
Figure: Continuity Checks



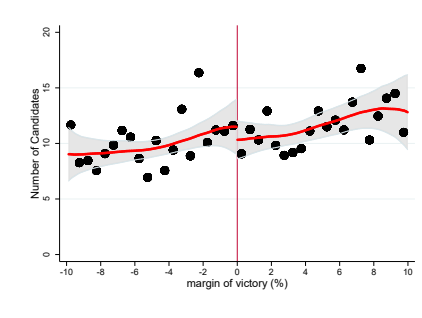
(a) Growth of Light in t-1



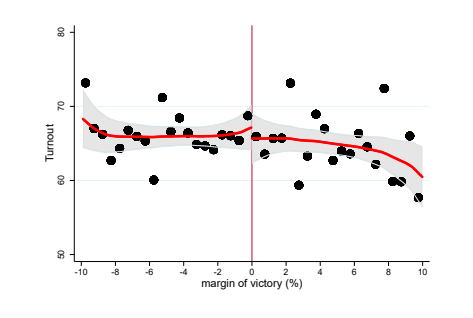
(b) Share Incomplete Roads in t-1



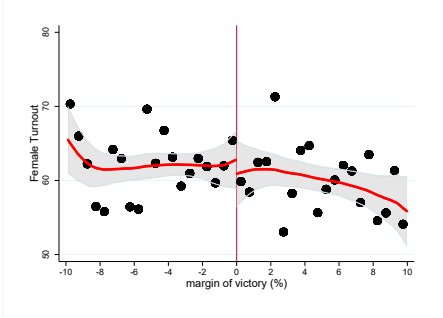
(c) Electorate Size in t-1



(d) Number of candidates in t-1

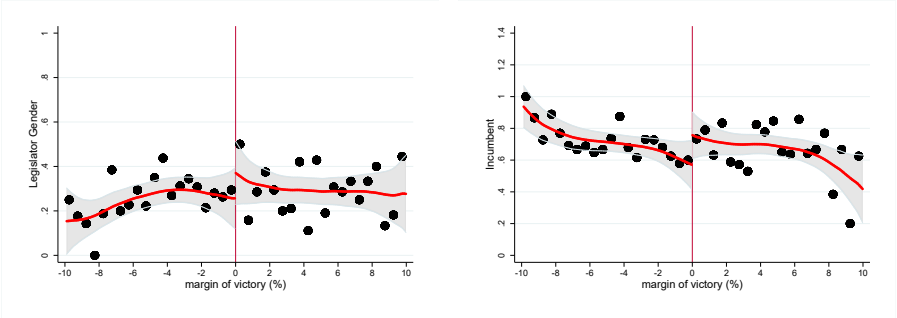


(e) Turnout in t-1



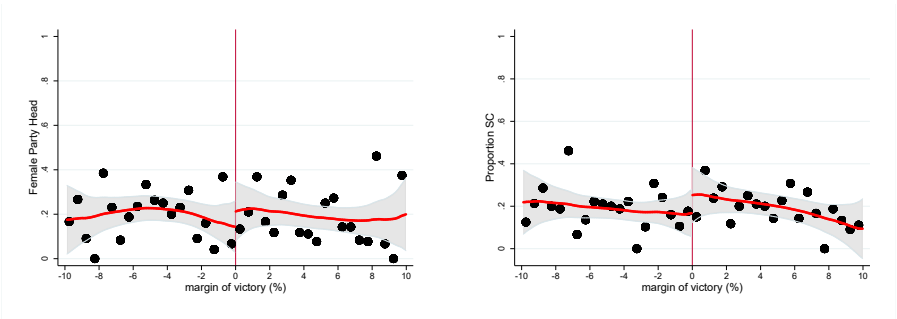
(f) Female Turnout in t-1

Balance in pre-determined covariates II



(g) Female legislator in t-1

(h) Incumbent in t-1

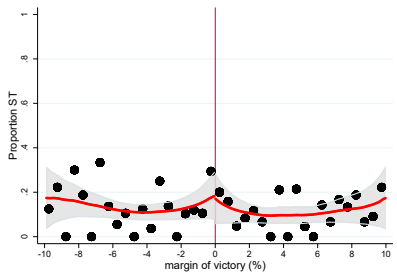


(i) Female party head in t-1

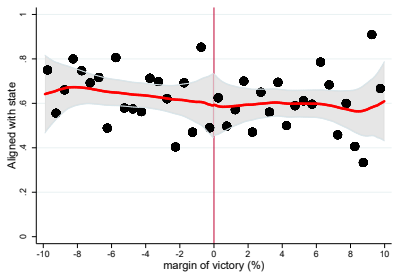
(j) SC-reserved constituency in t-1

Figure: Continuity Checks

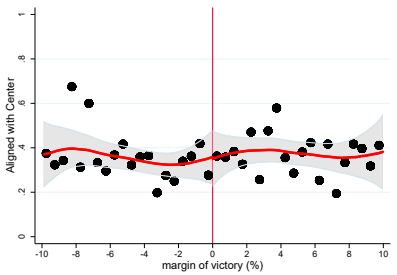
Balance in pre-determined covariates III



(a) ST-reserved constituency in t-1



(b) Aligned with state government in t-1

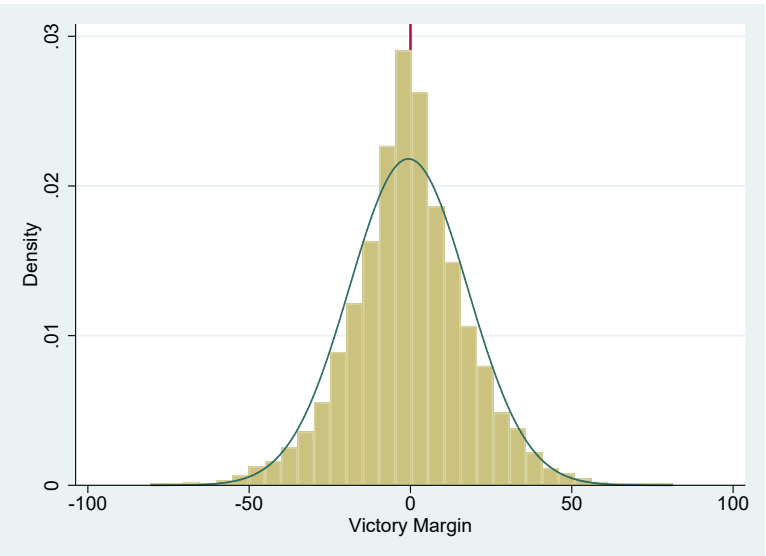


(c) Aligned with central government in t-1

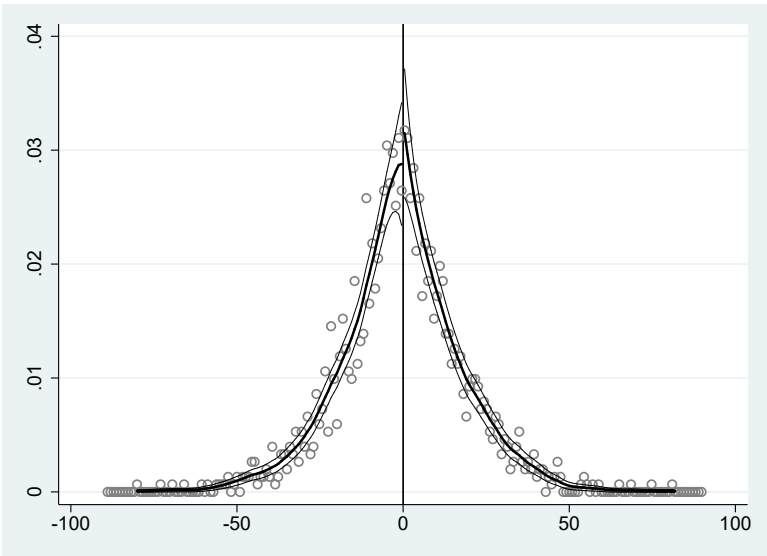
Figure: Continuity Checks

Distribution of running variable

Figure: Density of the Forcing Variable



(a) Density of Victory Margin



(b) McCrary's Density Test

Table: Robustness tests

	(1)	(2)	(3)	(4)
	Growth of Light$_{t+1}$			
	Local Linear			
	Without outliers	With alternative margin	Neighbor sample	Party affilation
Female MLA$_t$	7.18**	14.78***	15.52**	13.52**
	[3.61]	[5.50]	[6.54]	[5.90]
INC				6.32**
				[2.69]
BJP				1.79
				[3.44]
R^2	0.02	0.02	0.03	0.04
N	568	685	553	584
Bandwidth	6.61	7.55	7.4	6.68

Legislator Gender and Asset Growth

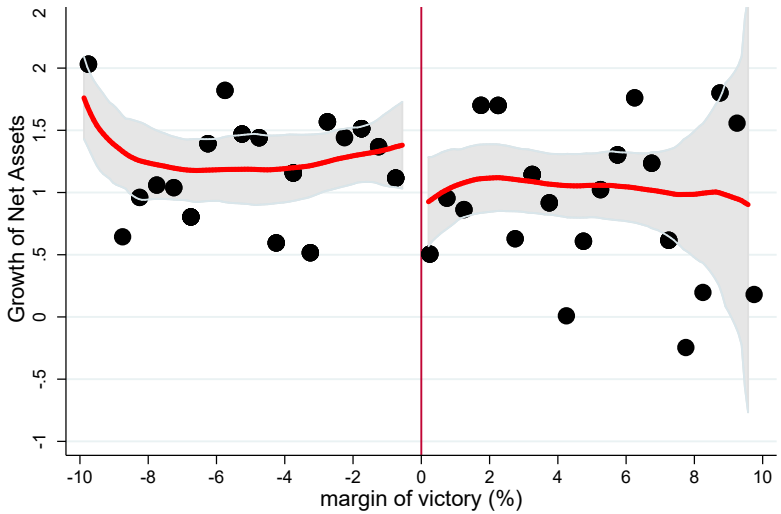


Table: Legislator Gender and Asset Growth

	(1)	(2)	(3)	(4)	(5)
	Growth of Assets				
	Local Linear				Local Quadratic
	IK (h)	h/2	2h	IK (h) with Covariates	IK (h)
Female MLA_t	-0.50*	-0.61	-0.03	-0.48**	-0.76*
	[0.25]	[0.45]	[0.28]	[0.22]	[0.41]
R^2	0.01	0.01	0	0.12	0.01
N	383	176	734	340	383
Bandwidth	3.27	1.63	6.54	3.27	3.27

Legislator Gender and Road Completion

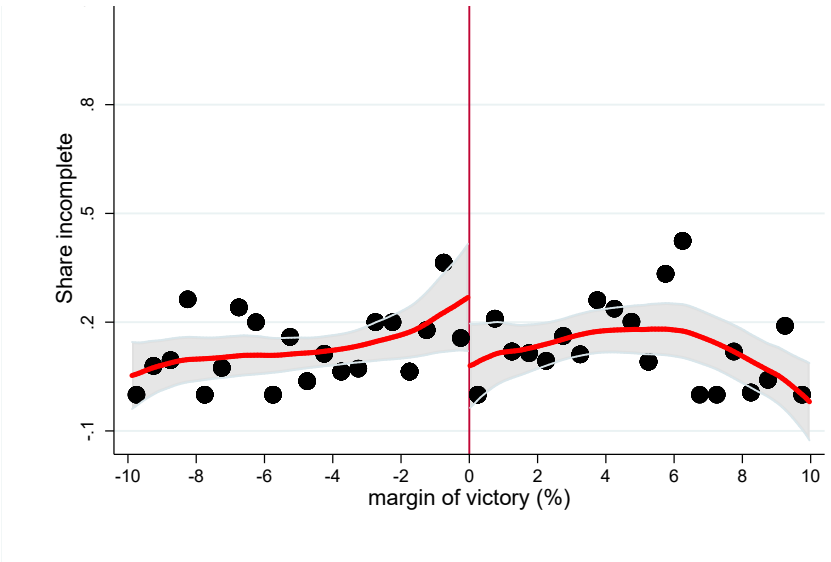


Table: Legislator Gender and Road Completion

	(1)	(2)	(3)	(4)	(5)
	Road Projects				
	Local Linear				Local Quadratic
	IK (h)	h/2	2h	IK (h) with Covariates	IK (h)
	Panel A: Share of Incomplete Road Projects				
Female MLA	-0.22*	-0.26*	-0.17*	-0.22**	-0.35*
	[0.12]	[0.15]	[0.08]	[0.09]	[0.18]
R^2	0.04	0.11	0.03	0.83	0.05
N	122	63	226	67	122
Bandwidth	3.29	1.64	6.58	3.29	3.29
	Panel B: Number of Road Projects Awarded				
Female MLA	-1.13	-1.38	-0.88	0.05	-1.08
	[0.85]	[1.12]	[0.69]	[0.94]	[1.25]
R^2	0.01	0.03	0.01	0.43	0.02
N	255	134	435	110	255
Bandwidth	6.11	3.05	12.21	6.11	6.11

Table: Probability of Winning as a Function of Criminality

	(1)	(2)	(3)
	Probability of Winning		
	Panel A: Full Sample		
	OLS	IK(h)	IK(h) with covariates
Criminal	0.107***	-0.0424	-0.0855
	(0.0189)	(0.0596)	(0.0669)
N	2823	1227	977
	Panel B: Mixed Gender Sample		
Criminal	0.180***	0.0142	-0.0833
	(0.0534)	(0.175)	(0.204)
N	342	142	111

Table: RD Check for Road Completion- Constituency population thresholds

	(1)	(2)	(3)
	Average Village Population	Proportion of Villages with Population>=500	Proportion of Villages with Population>=1000
Female MLA_t	155.1	-0.0764	0.00707
	(500.10)	(0.10)	(0.12)
Bandwidth	10.7	2.27	3.23
N	281	72	104