



Women in Legislatures

Hypotheses

- More college educated populations are more likely to elect women to legislatures
 - Due to both demand- and supply-side factors

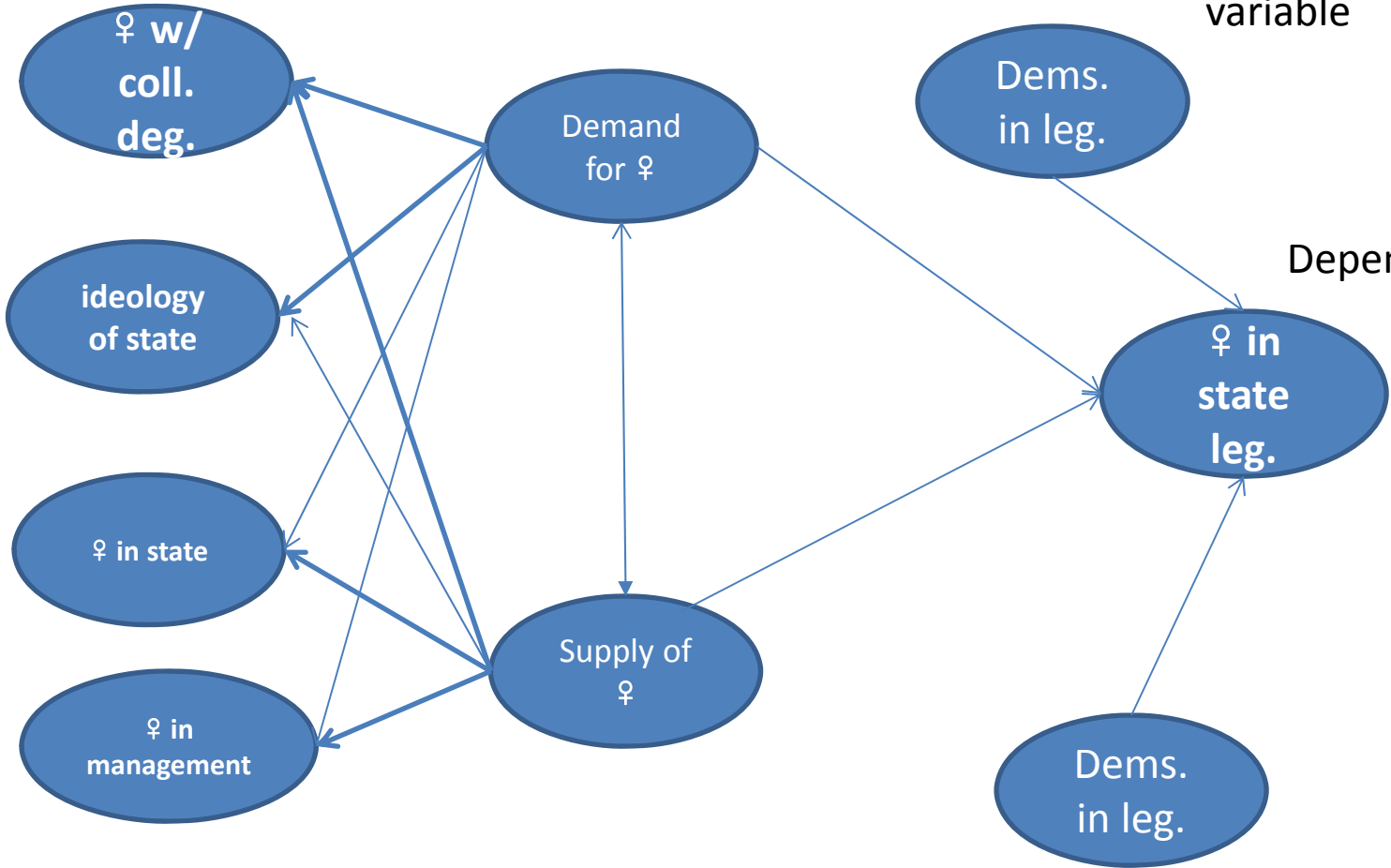
Model

- General model:
 - % women in a state legislature = f(women w/ college degree, partisanship of legislature, ideology of state, population female, women working in management, multi-member districts)

Graphically

Random independent variable

Dependent variable



Indicator variables

Latent variables

Control variable

Aggregated linear probability model

- Same point as medical marijuana presentation
 - If we think of this analysis as predicting the probability that a women will be elected to a state legislature, rather than a man, the aggregate analysis probably over-states the individual-level effect

Gay Marriage Example: Aggregated & weighted

```
. reg favorgay age [aw=n]
(sum of wgt is 5.3942e+04)
```

Source	SS	df	MS			
Model	5.36845523	1	5.36845523	Number of obs =	2656	
Residual	81.4534182	2654	.030690813	F(1, 2654) =	174.92	
Total	86.8218735	2655	.032701271	Prob > F =	0.0000	
				R-squared =	0.0618	
				Adj R-squared =	0.0615	
				Root MSE =	.17519	

	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
favorgay						
age	-.0076449	.000578	-13.23	0.000	-.0087783	-.0065114
_cons	.8929256	.0275494	32.41	0.000	.8389052	.9469461

Unweighted coefficients

	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
favorgay						
age	-.0062511	.0005547	-11.27	0.000	-.0073389	-.0051633
_cons	.7395918	.0285278	25.93	0.000	.6836528	.7955308

What to Report

	Bivariate	Multivariate
Constant	0.00 (0.05)	0.93* (0.52)
College	0.89*** (0.16)	0.90** (0.35)
Democrat		0.09 (0.06)
Liberal		0.54 (0.34)
Female		-1.55 (1.12)
Binders		-0.83 (0.50)
MMD		0.032* (0.018)

Please report N's, R^2 , and s.e.r.

Replication?

	Bivariate	Multivariate
Constant	0.00 (0.05)	0.93* (0.52)
College	0.89*** (0.16)	0.90** (0.35)
Democrat		0.09 (0.06)
Liberal		0.54 (0.34)
Female		-1.55 (1.12)
Binders		-0.83 (0.50)
MMD		0.032* (0.018)

Number of obs = 49
 F(5, 43) = 10.45
 Prob > F = 0.0000
 R-squared = 0.5486
 Adj R-squared = 0.4961
 Root MSE = .04914

women	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
college	.451301	.2270458	1.99	0.053	-.0065804 .9091824
dem	.075539	.0648461	1.16	0.250	-.0552357 .2063136
liberal	.627237	.3471987	1.81	0.078	-.0729559 1.32743
populationFemale	-2.38114	1.024359	-2.32	0.025	-4.446958 -.3153226
mmd	.0233221	.0179849	1.30	0.202	-.0129479 .059592
_cons	1.152126	.5125052	2.25	0.030	.1185612 2.185692

Weighting?

	Unweighted	Weighted
College women	0.45 (0.23)	0.52 (0.24)
Democrats	0.08 (0.06)	0.08 (0.07)
Liberals	0.63 (0.35)	0.56 (0.36)
Pop. female	-2.38 (1.02)	-3.13 (1.21)
MM Dist.	0.023 (0.018)	0.032 (0.018)
Intercept	1.15 (0.51)	1.52 (0.61)
N	49	49
R ²	.55	.60
s.e.r.	0.049	0.049

Specification

- Didn't control for constituency size or full-time legislature due to zero correlation

Adding full-time legislature

	Without	With
College women	0.52 (0.24)	0.41 (0.24)
Democrats	0.08 (0.07)	0.04 (0.07)
Liberals	0.56 (0.36)	0.85 (0.39)
Pop. female	-3.13 (1.21)	-2.73 (1.21)
MM Dist.	0.032 (0.018)	0.025 (0.018)
Full-time leg.		-0.046 (0.026)
Intercept	1.52 (0.61)	1.32 (0.60)
N	49	49
R ²	.60	.62
s.e.r.	0.049	0.048