

# The Effect of Constitutional Provisions on Education Policies and Outcomes

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# Context

- ▶ **Constitutions** – incomplete contracts between citizens & their elected leaders.
  - ↳ principles & provisions for legislative and executive bodies of government
  - ↳ define minimum standards to be met by the state & enforceable in courts
- ▶ Constitutional provisions vary by the **strength of clauses**.
  - ↳ general statements about provision of service
  - ↳ minimum standards
  - ↳ specific policy requirements
- ▶ Today: causal effects of changes in **clauses** on **outcomes**.

## Application: Education in the US

- ▶ **Education** as a constitutional right in many countries.
- ▶ US constitution silent on the subject of education.
  - ↪ US Supreme Court: no fundamental right to education under the US Constitution
- ▶ Every **state constitution** mandates establishment of a public education system.
  - ↪ large variation in strength of language across states and time

Example – Illinois

# Presentation Outline

- ▶ Effects of **constitutional amendments** on **education inputs & outcomes**.
  - ↪ **immediate** effects: in a few years since adopting an amendment
  - ↪ **life cycle** effects: labor market outcomes of individuals subjected to reforms
- ▶ Propose the **mechanism** driving these results.
  - ↪ study post-enactment actions of the legislature and the courts

## IMMEDIATE EFFECTS OF CONSTITUTIONAL AMENDMENTS

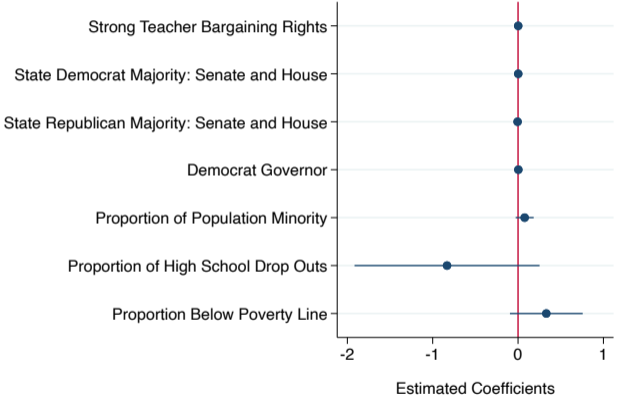
# Data

- ▶ School district finances and student demographics.
  - ↳ Common Core of Data (CCD) of the National Center for Education Statistics (NCES)
- ▶ Student learning achievement outcomes.
  - ↳ Stanford Education Data Archive (SEDA): average cohort-standardized scaled achievement scores
- ▶ County-level demographic and economic characteristics.
  - ↳ National Historical Geographic Information System (NHGIS)
- ▶ Detailed histories of 74 proposed amendments raising minimum requirements.
  - ↳ 1990-2018, combined and verified from various sources

[Details of the Amendments](#)

# What determines whether an amendment is proposed?

► **Dependent variable:** whether an amendment was on the ballot in state-year.



Note: 90% Confidence Intervals depicted in graph. N=1450. Specification includes year fixed effects.

► **Concern:** states more likely to propose amendments have already better outcomes.

# Empirical Methodology

- ▶ Exploit procedure for adopting amendment.
  - ↪ **step 1**: bill introduced in legislature or petition for signatures initiated
  - ↪ **step 2**: if a bill passes step 1, proposal put on ballot for citizens to vote on
  
- ▶ We examine amendments that passed **step 1**.
  - ↪ discontinuity in **step 2** defines treatment groups



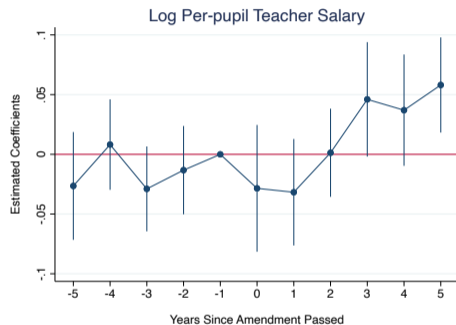
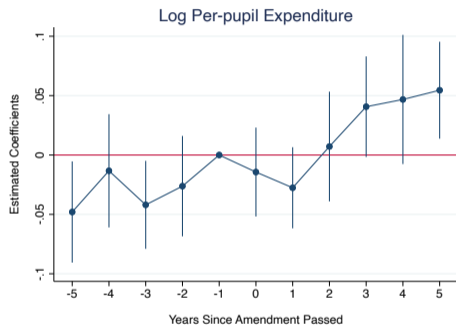
# Empirical Method: Event Study

- ▶ Exploit procedure for adopting amendment ([step 2](#)).

$$Y_{lst} = I_s + I_t + \sum_{k=-K}^{-2} \beta_k C_{s,t}^k + \sum_{k=0}^L \beta_k C_{s,t}^k + E_{t \in \{-K, L\}} + \gamma X_{lst} + \epsilon_{lst}$$

- ↪  $Y_{lst}$ : outcome in local education agency  $l$ , state  $s$ , and time period  $t$
- ↪  $I_s, I_t$ : state and year fixed effects
- ↪  $C_{st}$ : takes value 1 in years after amendment passed
- ↪  $E_{t \in \{-K, L\}}$ : end year dummies
- ↪  $X_{lst}$ : vector of controls

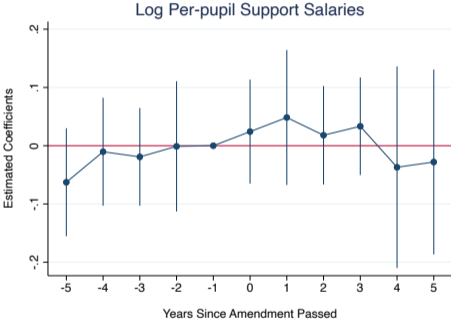
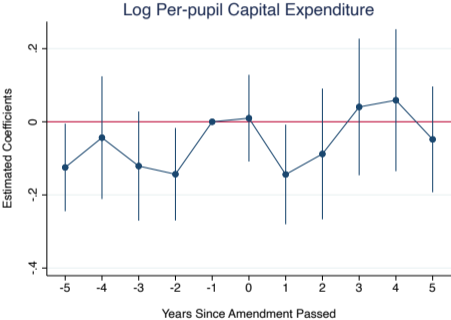
# Significant increase in per-pupil expenditures and teacher salaries



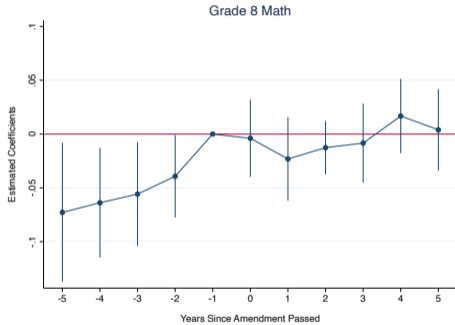
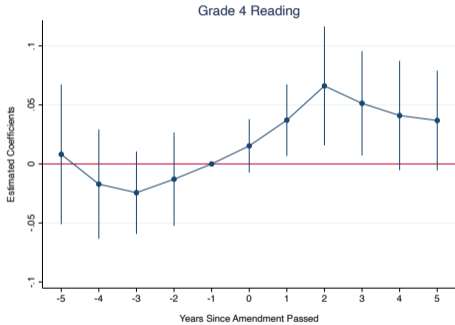
Non-Finance Amendments

Long Run Effects

# No effect on capital outlays and support staff salaries



# Effect on Achievement Outcomes



## LIFE CYCLE EFFECTS OF CONSTITUTIONAL AMENDMENTS

# Data

- ▶ Individual records from the Survey of Income and Program Participation Synthetic Beta (SIPP-SSB).
  - ↔ links persons from the 1984-2008 SIPP surveys to Social Security Administration data on income and federal program participation from 1984-2020.

Any views expressed are those of the authors and not those of the U.S. Census Bureau. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (CBDRB-FY22-CED001-0012).

# Empirical Methodology

- ▶ Idea: compare **labor outcomes** between **young** (age 1-17) and **old** cohorts (age 18-30) at the time of the amendment's enactment.
- ▶ Stacked DiD: for each constitutional amendment (**event**):
  - ↪ **treated**: individuals in a state enacting an amendment
  - ↪ **control**: individuals in a state that has not enacted an amendment so far in the sample

## Empirical Method: Stacked DiD

- ▶ Exploit differences among cohorts affected and not affected by an amendment.

$$y_{ies} = \beta_0 + \beta_2 \text{treat}_{es} + \beta_3 \text{youngCohort}_{ie} + \delta \text{treat}_{es} \times \text{youngCohort}_{ie} + \beta_4 X_{ies} + \alpha_e + \lambda_{es} + \epsilon_{ies}$$

- ↳  $y_{ies}$ , long-term labor market outcomes of interest
  - ↳  $\text{treat}_{es}$ : binary indicator of an amendment enacted
  - ↳  $\text{youngCohort}_{ie}$ : indicator of young cohort, i.e. exposed to the effects of an amendment
  - ↳  $X_{ies}$ : controls: demographics, governor party affiliation
- ▶ Long-term labor market outcomes of interest
    - ↳ individual's average annual labor wage income (age 23-25)
    - ↳ indicator of any SSDI program assistance between age 18-24
  - ▶ Heterogenous effects.
    - ↳ non-white & child poverty



# No effects of childhood exposure amendments on the pooled sample

	All		Non-White		Child Poverty	
	Income	SSDI Benefits	Income	SSDI Benefits	Income	SSDI Benefits
Young	0.02 (0.015)	0.208*** (0.011)	0.016 (0.015)	0.218*** (0.011)	-0.185*** (0.029)	0.059*** (0.006)
Treat	0.179*** (0.002)	-12.57 (6.969)	0.164*** (0.007)	-13.56 (7.514)	34.90*** (1.964)	0.018 (0.025)
Young X Treat	0.003 (0.014)	0.009 (0.014)	-0.001 (0.012)	0 (0.009)	0.014 (0.037)	0.055 (0.032)
Non-white			-0.270*** (0.004)	0.009** (0.003)		
Treat X Non-white			0.113** (0.041)	0.014 (0.014)		
Young X Non-white			0.018*** (0.004)	-0.022*** (0.004)		
Young X Treat X Non-white			-0.015 (0.030)	0.015 (0.021)		
Treat X Below					0.006 (0.036)	-0.035 (0.020)
Young X Below					-0.361*** (0.012)	0.047*** (0.007)
Below Poverty					-0.252*** (0.008)	-0.032*** (0.003)
Young X Treat X Below					0.105* (0.053)	-0.116*** (0.030)
Y mean	9.74	0.263	9.74	0.263		
R2	0.035	0.034	0.035	0.035	0.065	0.008
N	1791000	323000	1791000	323000	602000	96000

## No differential effects among non-white children

	All		Non-White		Child Poverty	
	Income	SSDI Benefits	Income	SSDI Benefits	Income	SSDI Benefits
Young	0.02 (0.015)	0.208*** (0.011)	0.016 (0.015)	0.218*** (0.011)	-0.185*** (0.029)	0.059*** (0.006)
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# Children from poor families as main beneficiaries of the amendments

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	Income	SSDI Benefits	Income	SSDI Benefits	Income	SSDI Benefits
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## EVIDENCE ON THE MECHANISM

# Mechanism: How Constitutional Provisions Affect Education Outcomes

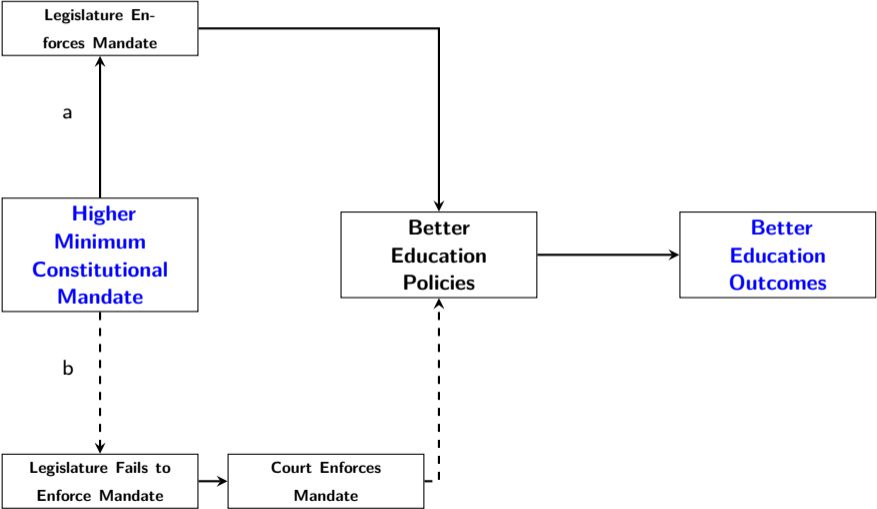
**Higher  
Minimum  
Constitutional  
Mandate**

**Better  
Education  
Outcomes**

# Mechanism: How Constitutional Provisions Affect Education Outcomes



# Mechanism: How Constitutional Provisions Affect Education Outcomes



## Channel [a]: Data Construction

- ▶ LexisNexis: 48,900 appellate court cases and 721,500 legislative bills on education.
  - ↪ court cases: mostly court of appeals and supreme courts
- ▶ Data cleaning: 13,049 relevant cases and 34,792 bills enacted.
  - ↪ several irrelevant cases/bills: accident involving school bus
  - ↪ manually classify 1,400 cases and 1,900 bills into detailed categories
  - ↪ use machine learning models to categorize the remainder of the documents

Details: Legislative Bills

Appellate Court Cases



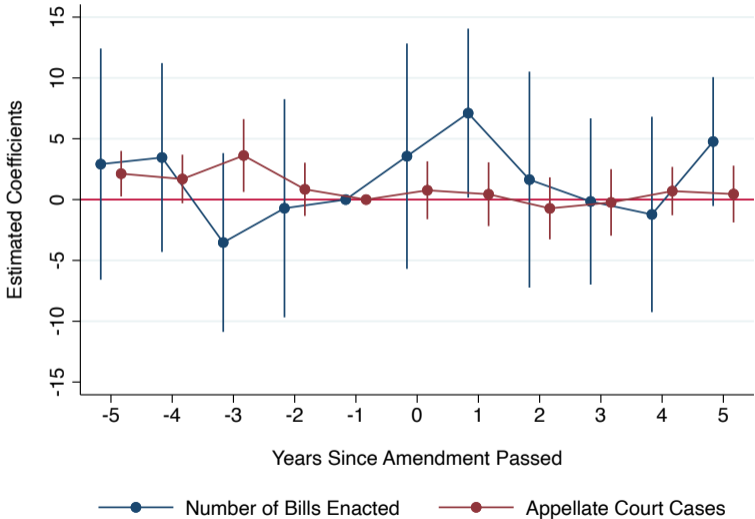
# Empirical Methodology

- ▶ Event study: examine how legislature and judiciary respond.

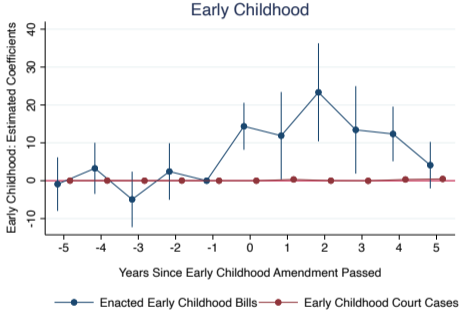
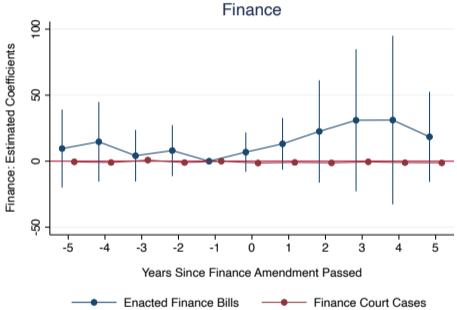
$$Y_{lst} = I_s + I_t + \sum_{k=-K}^{-2} \beta_k C_{s,t}^k + \sum_{k=0}^L \beta_k C_{s,t}^k + E_{t \in \{-K, L\}} + \gamma X_{lst} + \epsilon_{lst}$$

- ↪  $Y_{lst}$ : number of bills enacted or the number of appellate court cases
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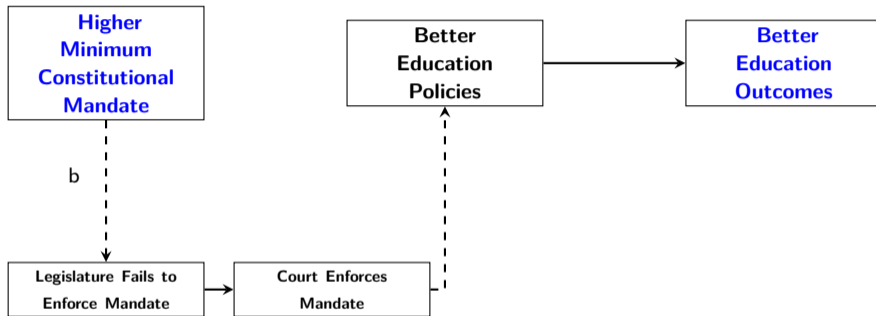
# Legislature responds when amendments passed; no increase in court cases



# Effect of Amendments - By Type of Education Issue



## Channel [b] of Mechanism



► Case study: [school finance reforms](#).

↪ school finance litigation: inequality in spending may be unconstitutional

↪ higher constitutional standards ↗ probability of funding system ruled unconstitutional

## EXTENSIONS: POLITICAL CYCLE

## Extension: Hypothesis of Political Cycle in the US

- ▶ Does intensity and direction of **education legislation** changes with changes in the **political composition of legislature**?
  - ↪ yes: republican majority is more active in enacting educational bills
- ▶ Is the political cycle **weaker** in states with **stronger constitutional provisions** in education?
  - ↪ probably yes: work in progress

## CONCLUSION

# Our Results

- ▶ Raising minimum standards in education clauses leads to:
  - ↳ increase in education inputs
  - ↳ improvement in outcomes
- ▶ On average, legislature responds by enacting policies.
  - ↳ no increase in the number of education appellate court cases
- ▶ When legislature fails to enact policies, courts intervene.
  - ↳ enforcement stronger with higher minimum constitutional standards
- ▶ Preliminary evidence on political cycle in the US education legislation.



Thank you for your attention!

More on this project can be found at [www.filippremik.com](http://www.filippremik.com).

## Example – Illinois state constitution

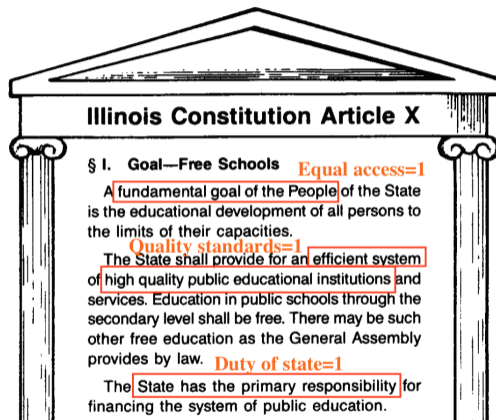


Image source: Kopecky, Frank, and Mary Sherman Harris. *Understanding the Illinois Constitution*. Illinois Bar Foundation, 1986.

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# Amendments that raise minimum requirements (1990-2018)

## [a] Improving education services

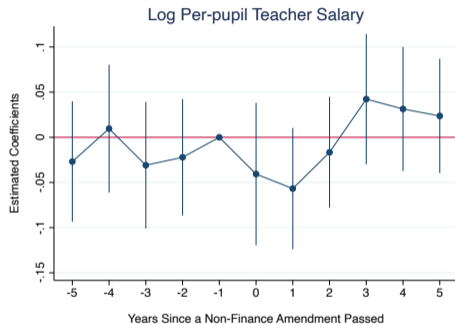
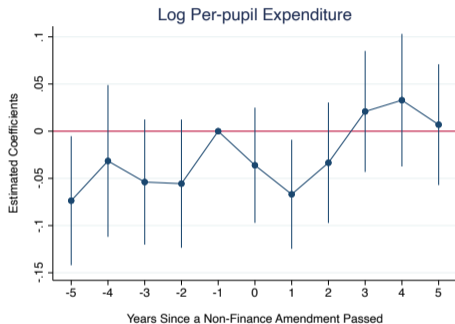
Classification	Frequency
Funding	22
Equal Access	12
Right to Education	3
Funding - Equitable Allocation of Funds	3
Expenditure Requirements	3
Education First - Paramount Issue	2
Improving quality of education	1
Establish adequate and efficient system of education	1

## [b] Specific education policy

Classification	Frequency
School Choice	8
Early Childhood Education	5
English Language Requirements	4
Teacher pay for performance	3
State Takeover of Failing Schools	2
Reduce Class Size	2
Accountability	1
Compulsory Attendance	1
Parental Rights	1
<b>Total</b>	<b>74</b>

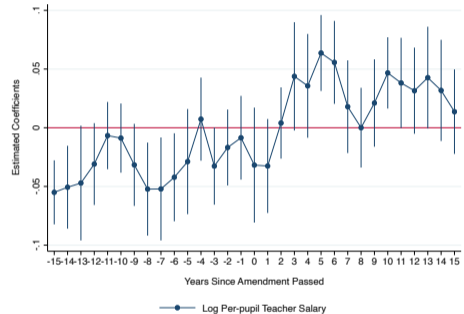
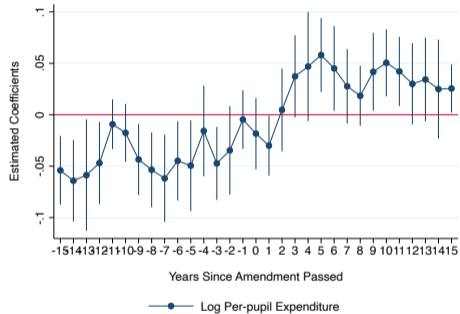
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# Effect is not mechanically driven by finance amendments



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# Effects on per-pupil total expenditure and teacher salaries are persistent



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## Composition of Legislative Bills Enacted (1997-2018)

<b>Bill Type</b>	<b>Number of Bills</b>	<b>Percentage of Total</b>
Governance	7,096	20.4
Teachers	6,852	19.7
School Safety	3,278	9.4
Finance	2,575	7.4
Early Childhood	2,527	7.3
School Choice	2,083	6.0
Accountability	1,194	3.4
Employee Benefits or Pension	958	2.8
Student Health	829	2.4
Environment And Energy	783	2.3
Attendance	729	2.1
Others	5888	16.8
<b>Total</b>	<b>34,792</b>	<b>100</b>

Source: Authors' calculations based on cases in LexisNexis.

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## Composition of Court Cases (1970-2020)

Case Type	Number of Cases	Percentage of Total
Employee, Compensation, Contract, or Unions	9,373	71.8
Finance	982	7.5
Accountability	899	6.9
School Choice and Desegregation	404	3.1
Employee - Other Issues	391	3.0
Other Education Issues	288	2.2
Discipline	233	1.8
School System	206	1.6
Privacy	167	1.3
Discrimination	106	0.8
<b>Total</b>	<b>13,049</b>	<b>100</b>

Source: Authors' calculations based on cases in LexisNexis.

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