Voluntary Environmental Programs: A Collective Action Perspective

Aseem Prakash

Department of Political Science
Center for Environmental Politics
University of Washington, Seattle

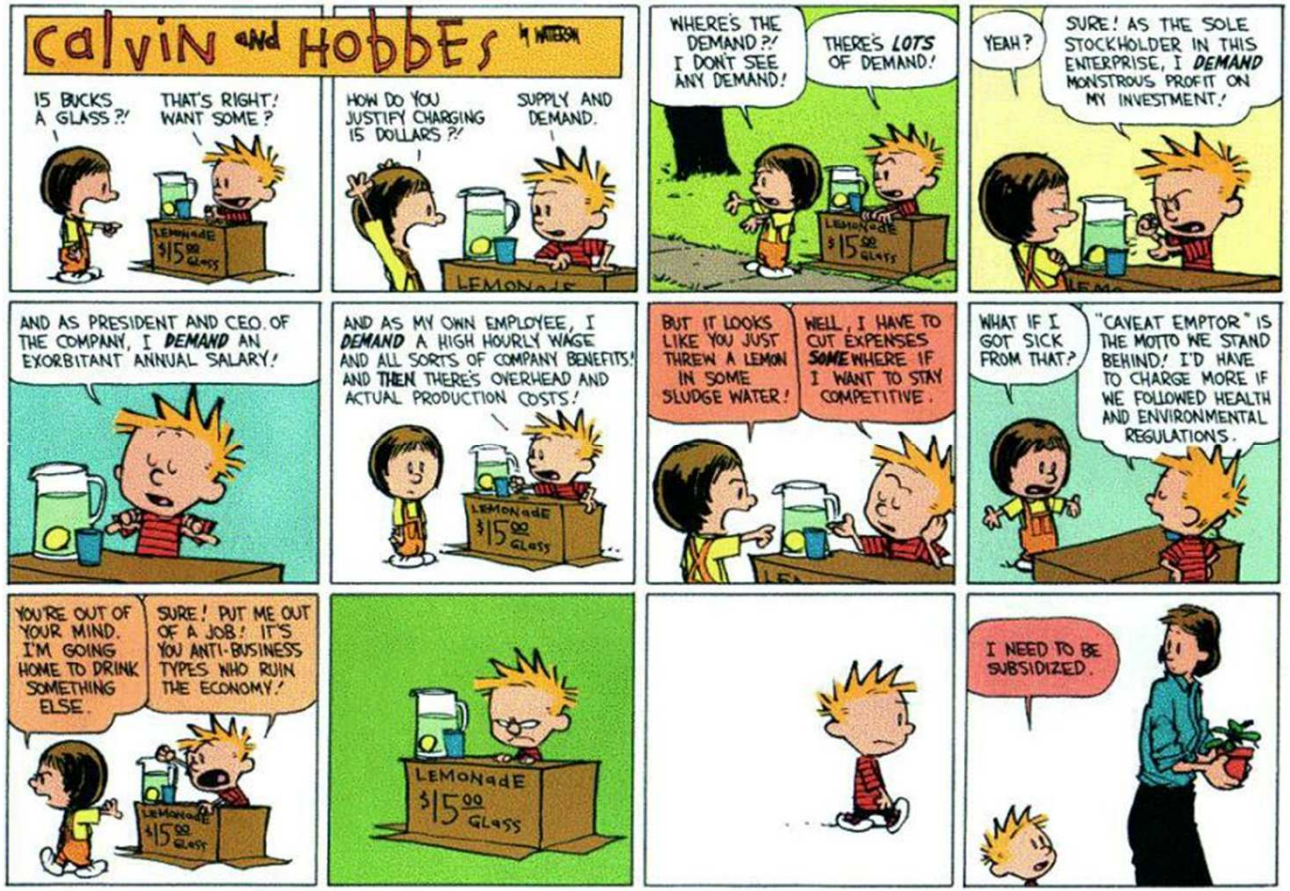
New institutionalism

- Institutions shape incentives, and therefore outcomes
- Individuals can craft institutions
- Institution both an dependent and independent variable
- Voluntary programs are institutions crafted by range of actors (trade associations, NGOs, governments) to influence firms' incentives regarding a range of issues
- Scholars study how they emerge (dependent variable) and how they shape firm-level outcomes (independent variable)

Issues?

- How to shape firms' behaviors?
- In our context, how to make firms pollute less?

Businesses tend to have a bad rep…



Core Ideas

- Voluntary programs can be conceptualized as a clubs
- Clubs are an institutional mechanism to address public goods provision problems
- Green clubs are not the silver bullet
- Need careful theoretical and empirical analyses

Do I influence your purchase decisions?


INTERNATIONAL-BROOM-MAKERS-UNION
UNION
MADE
REGISTERED
1893


RUGMARK
CERTIFICATION NO:
www.rugmark.net


goodweave
CERTIFIED RUGS
www.goodweave.net


U.S. GREEN BUILDING COUNCIL
LEED
USGBC


CERTIFIED
SUSTAINABLE
SEAFOOD
MSC
www.msc.org


energy
ENERGY STAR


FSC

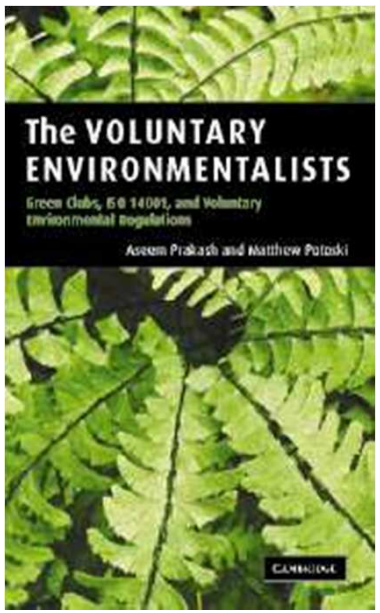

SUSTAINABLE
SLOPES
The environmental charter for ski areas

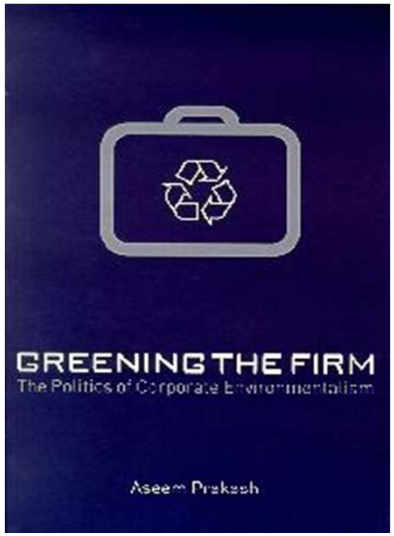

NEW ZEALAND
SUSTAINABLE
WINEGROWING

Presentation plan

- Theoretical approach: the club approach
- Key debates and evidence
- Empirical example


GREENING THE FIRM
The Politics of Corporate Environmentalism
Aseem Prakash


The VOLUNTARY ENVIRONMENTALISTS
Green Clubs, ISO 14001, and Voluntary Environmental Regulations
Aseem Prakash and Matthew Potoski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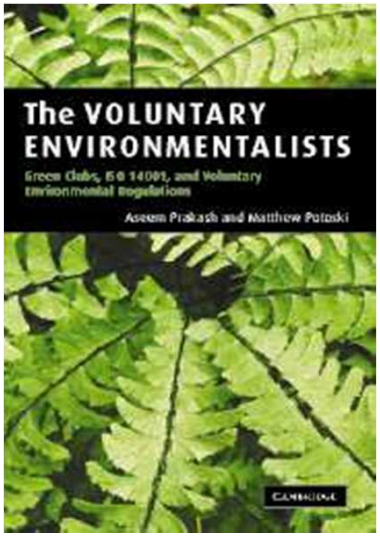
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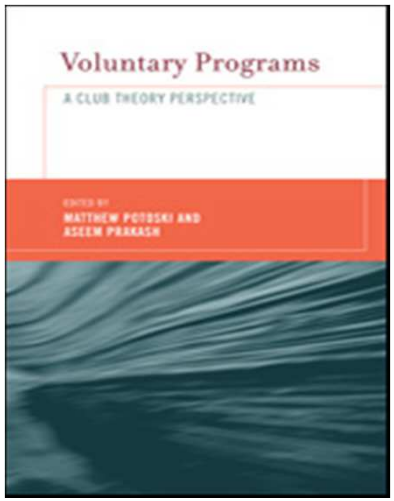
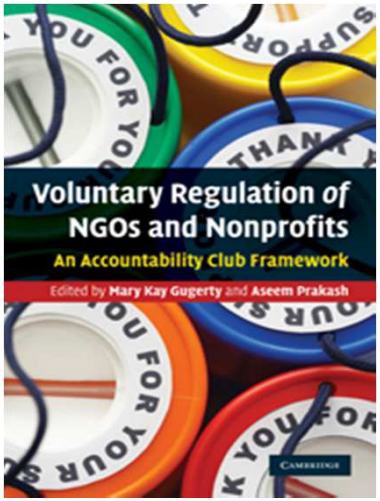

Voluntary Programs
A CLUB THEORY PERSPECTIVE
MATTHEW POTOSKI AND
ASEEM PRAKASH


Voluntary Regulation of NGOs and Nonprofits
An Accountability Club Framework
Edited by Mary Kay Gugerty and Aseem Prakash

Persuading firms to reduce pollution

- Assuming that reduction in pollution is expensive, we can influence firms by
  - Suing them
  - Making laws
  - Providing reputational incentives

Why should we care about voluntary programs?

- Litigation and regulations have diminishing returns
- Limits to traditional regulations
- Rampant governmental failure in much of the world
- Stakeholders should walk the talk

Regulation via Reputation: Voluntary Programs

- Private provision of public goods
- Motivate firms to provide environmental protection beyond legal requirements
- Also called self-regulation, certification codes, private authority, reflexive law, social regulation (the list is long…).

The Market for Environmental Virtue

Firms

- Some firms willing to provide environmental public goods
- But don't know how to convey this credibly and whether they will be compensated

Stakeholders

- Some stakeholders willing to compensate environmental stewards
- But cannot differentiate stewards from non-stewards

Market Failure

- Potential demand, potential suppliers, but no way to consummate the exchange

Solving information and assurance problems

- Voluntary programs consummate this exchange
- Voluntary program membership provides branding benefits which have the categories of club goods (non-rival and excludable)
- Reduce information asymmetries and potentially create a market for environmental virtue
- Superior over unilateral signal
- Voluntary programs as clubs

Typology

	Rival	Non-Rival
Excludable	Private	Club
Non-Excludable	CPR	Public

Institutional design

- Two collective action dilemmas
  - Recruitment: excludable benefits
  - Shirking: monitoring and enforcement

Problems

- Low entry barriers for program sponsorship
- Greenwashes co-exist with legitimate ones
- Might preempt or weaken public regulation

Debates

- Design: necessity of monitoring and enforcement
- Recruitment: bias in favor of leaders (or laggards)
- Efficacy: Do they work (reduce pollution)?
- Public Law: Do they undermine public law?

Empirical Example

- Efficacy: Do they reduce emissions of all pollutants? Why or why not?
- Relationship with public law: do they work across institutional settings?

ISO 14001

- Most widely adopted voluntary environmental program in the world
- Over 250,000 certified facilities in over 150 countries
- Launched by ISO in 1996

Research Questions

- How does the quality of domestic law condition the effect of ISO 14001 on pollution levels?
- Does the effect of ISO 14001 conditional on domestic law vary across pollutant type? Why?

Empirical Illustration

- Cross-country, panel study
- Look at national level effects which account for pollution reduction of ISO 14001 participants as well as spillover effects from participants to nonparticipants

Public Law and Private Environmental Regulation

- Stringency of public law influences marginal benefits and costs of participants seeking to implement the program
- Benefits: stringent law, fewer opportunities to differentiate oneself as an environmental steward
- Costs: stringent laws lead to smaller organizational slack to be devoted to stewardship

Strategic Stewardship

- How might firms deploy their organizational slack?
- Multiple demands on their resources
- Multiple ways for CSR, and CER; each with its own constituency
- Firms seek to maximize payoffs for environmental stewardship
- Focus resources on ones which are most visible

Stewardship and Issue Visibility

- Issue visibility influences supply of public goods
- Pollution reduction is a classic public good
- Firms deploy scare resources to get maximum visibility for environmental stewardship (air vs. water)

Empirical Expectations

	Lax Public Law	Stringent Public Law
More Visible Pollution	ISO 14001 adoption levels are associated with lower air pollution	ISO 14001 adoption levels are *not* associated with lower air pollution.
Less Visible Pollution	ISO 14 ISO 14001 adoption levels are *not* associated with lower water pollution.	ISO 14001 adoption levels are *not* associated with lower water pollution.

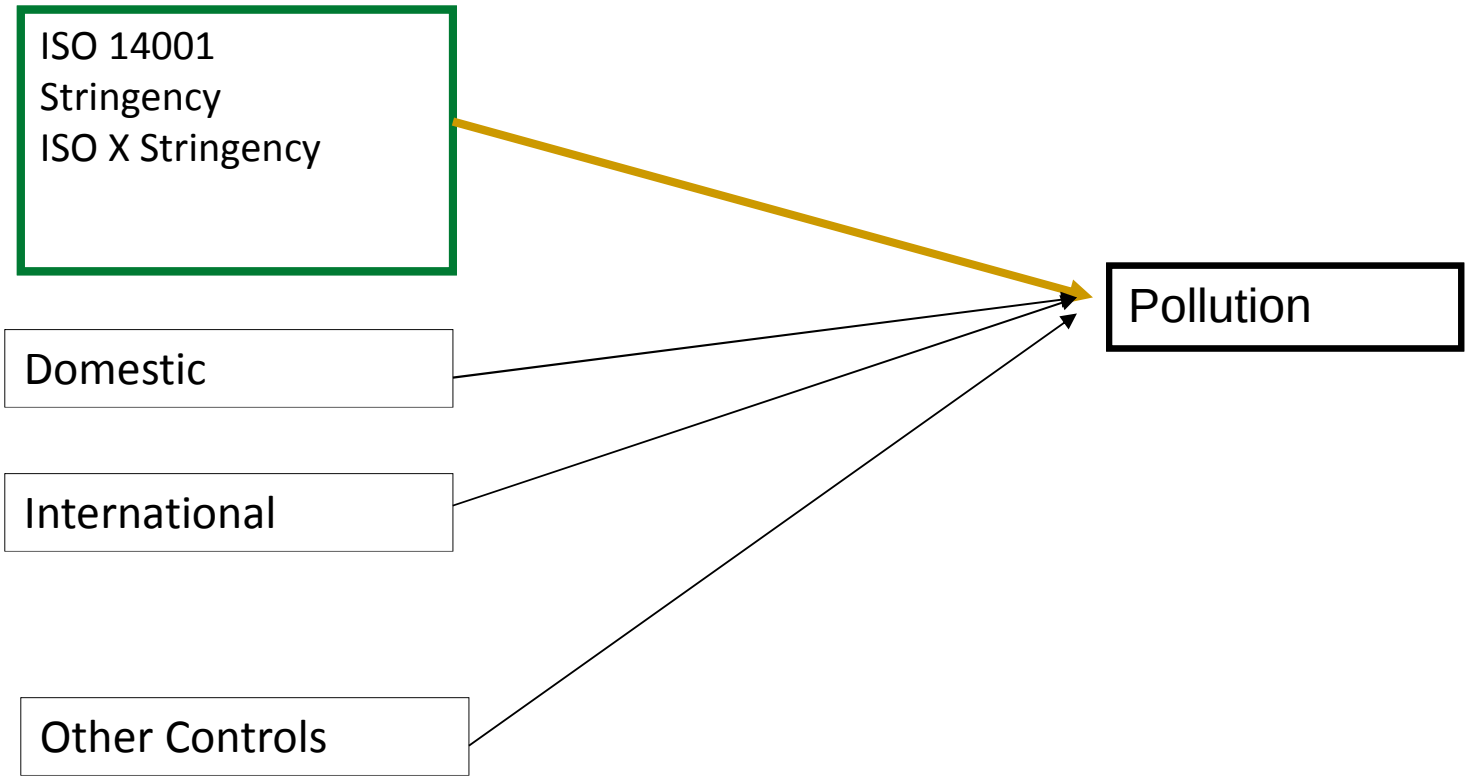
Data and Methods

- 135 countries, 1991-2005
- OLS, variables logged (GMM as robustness check)
- Country and year fixed effects
- Robust Standard Errors
- Key Variables of interest

- ISO annual count (logged), Regulatory stringency, interaction

- Response Variables
  - Air pollution: SO_2 (Giga grams, logged)
  - Water pollution: BOD (kg per day, logged)

Empirical Model



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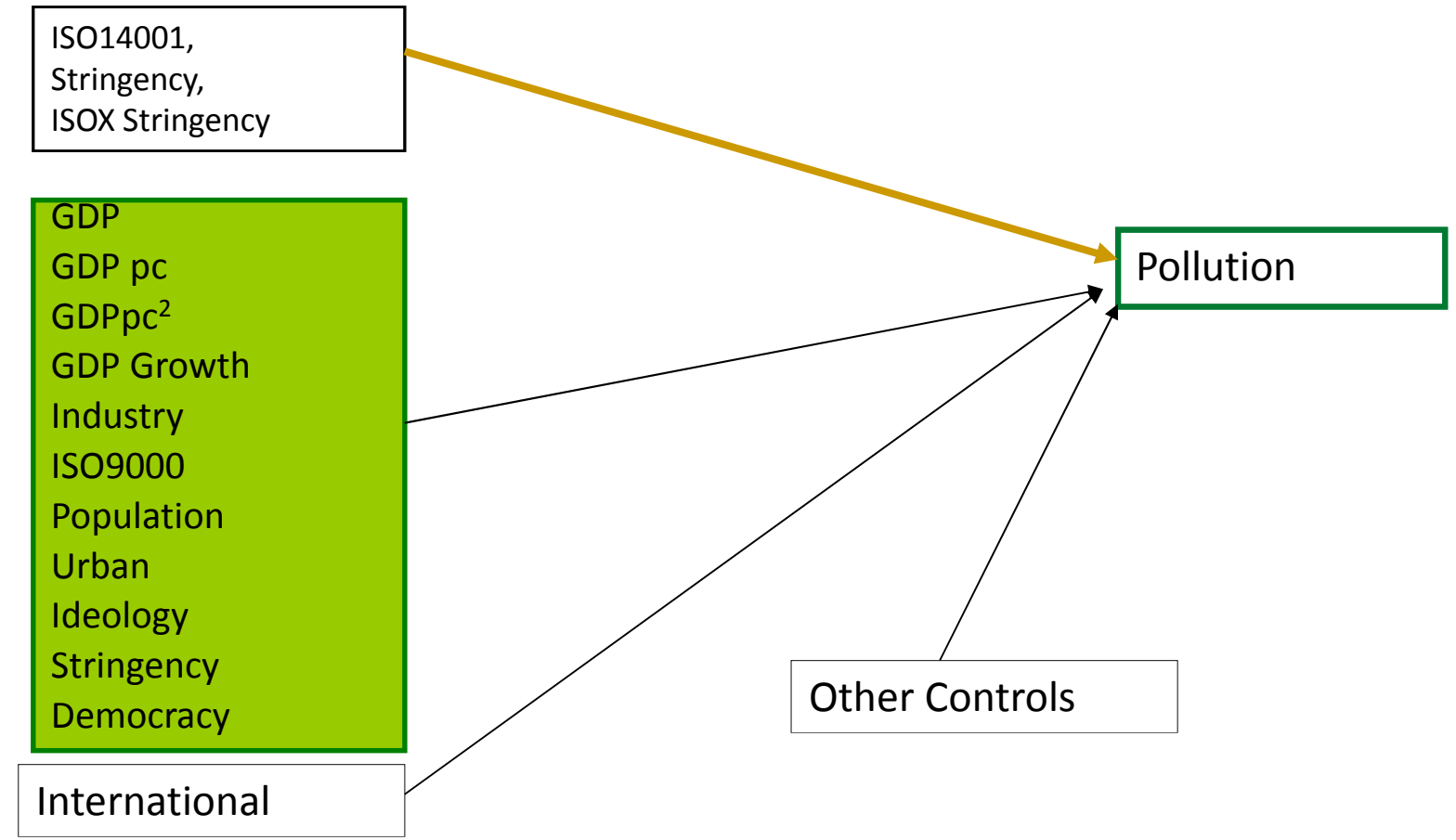

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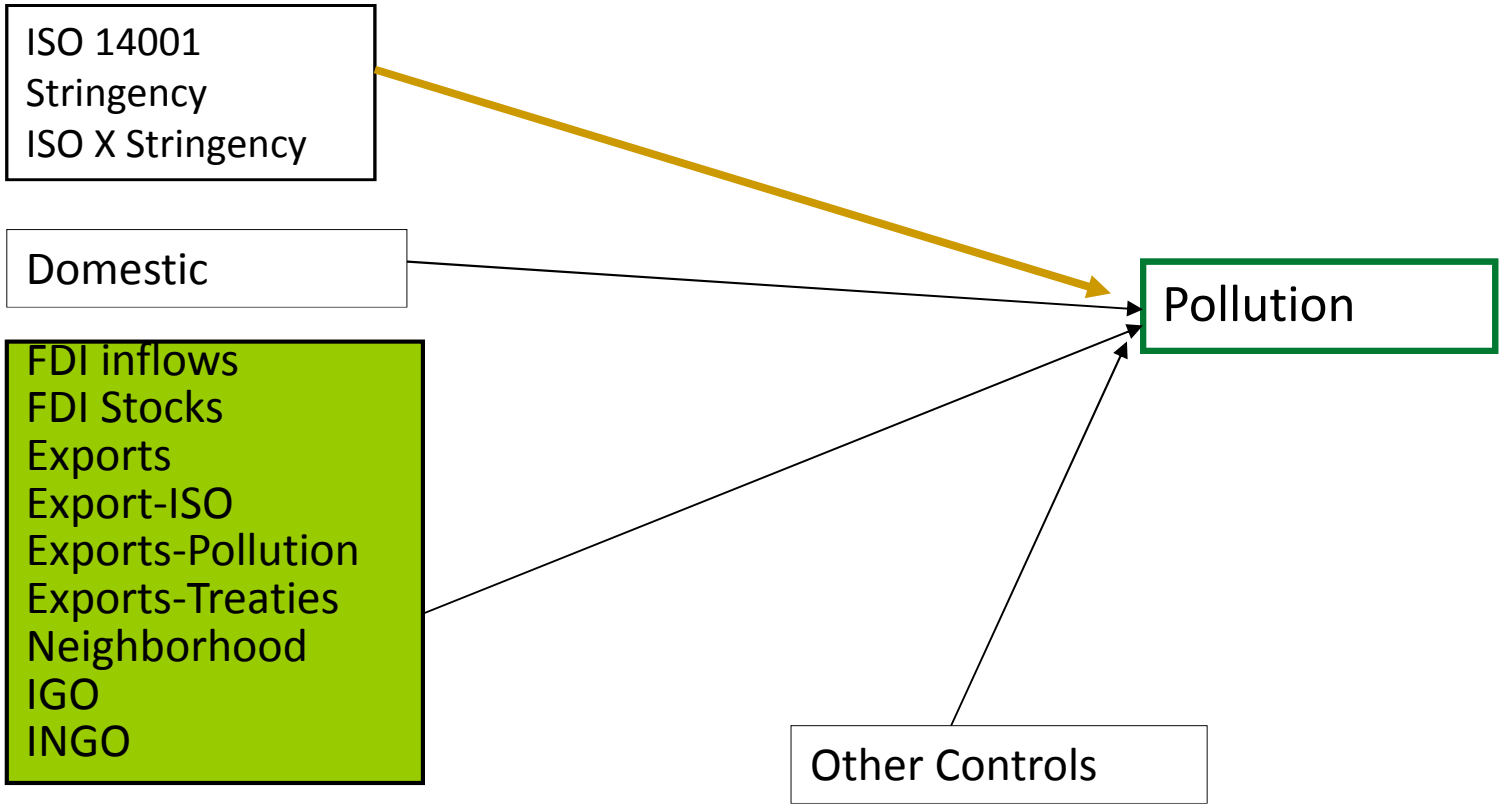

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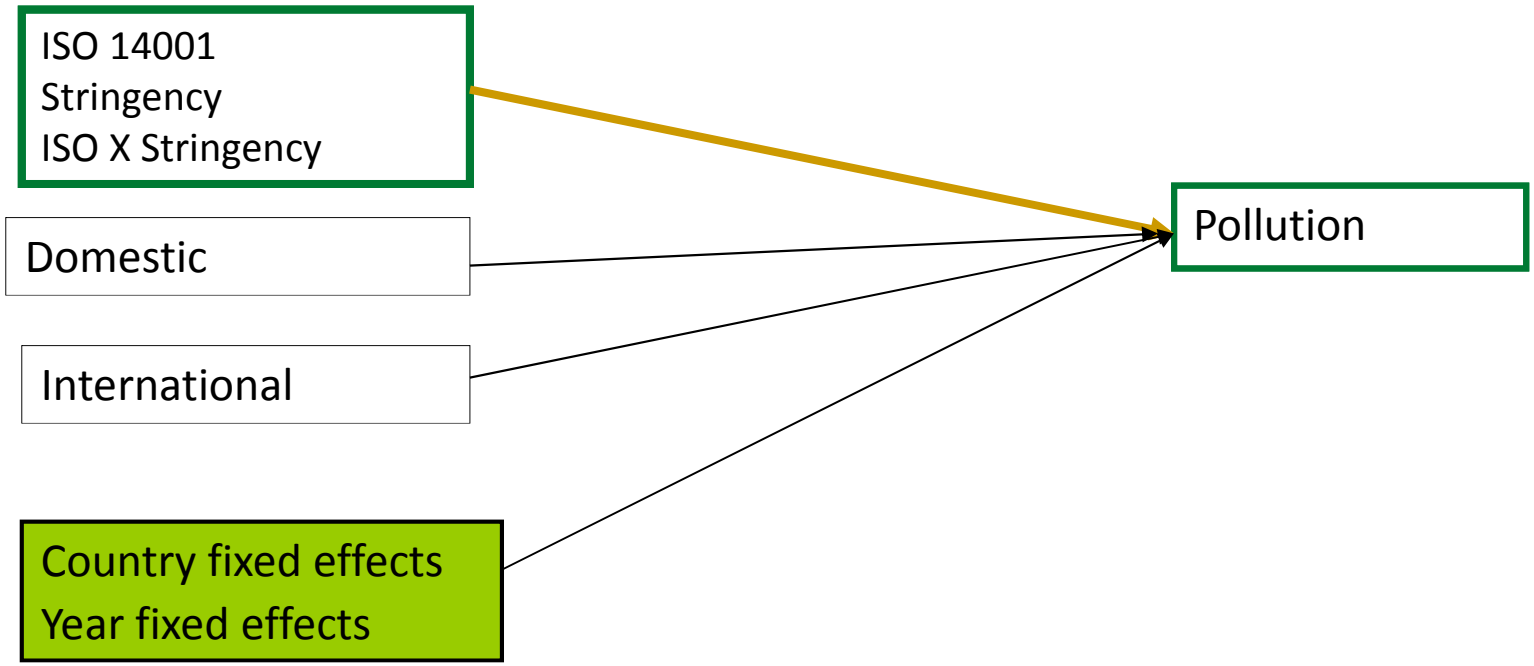


The Effect ISO 14001 Certifications on SO_2 and BOD levels Across Countries' Levels of Regulatory Stringency, Full Sample

Independent Variables	SO_2		BOD	
	Coeff.	**P-Values**	**Coeff.**	**P-Values**
.	.	.	.	.
ISO4001	-0.07	0.00	-0.02	0.14
Stringency	0.09	0.22	0.43	0.60
ISO14001 x Stringency	0.02	0.01	0.01	0.24

Figure1: Effect of ISO 14001 on So2 Emissions Across Stringency

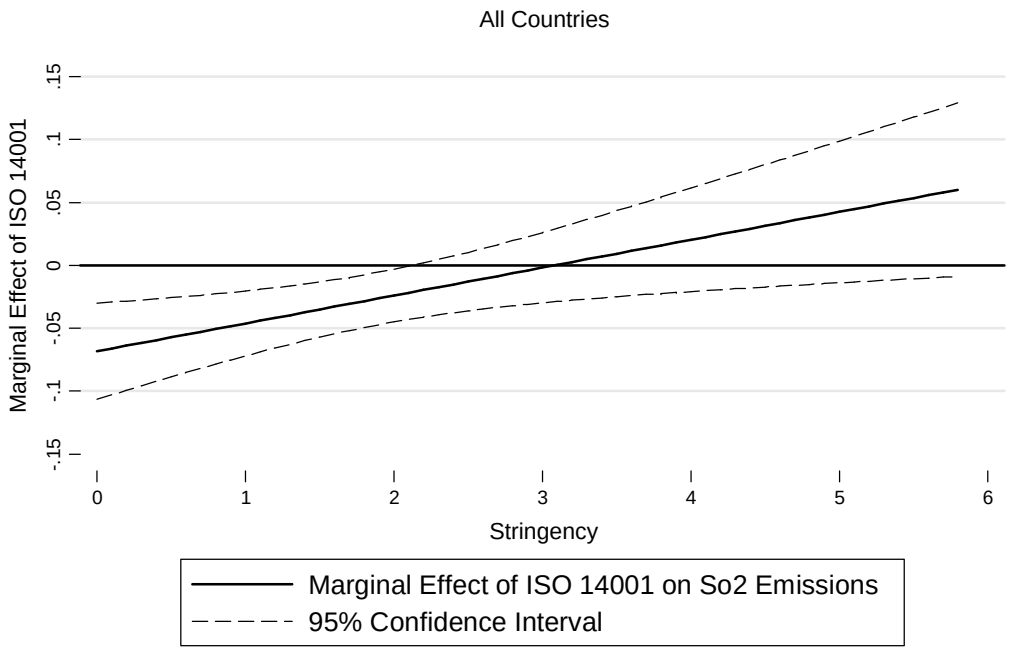
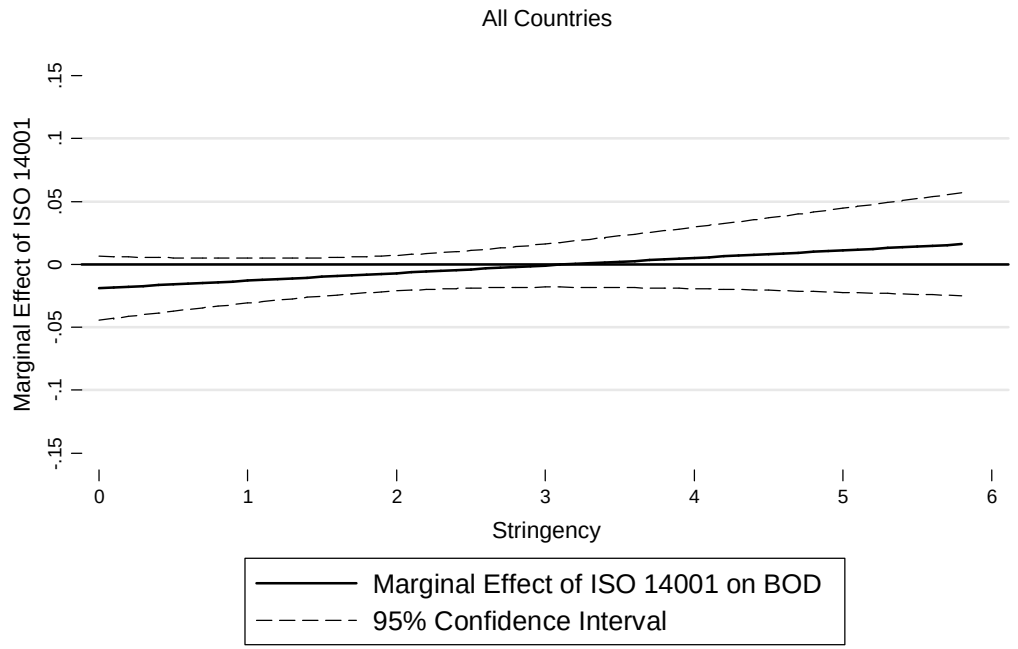


Figure 3: Effect of ISO 14001 on BOD Emissions Across Stringency



Interpretation

- For countries with stringency levels below 2.2, one percent increase in ISO 14001 certifications reduces national level SO_2 pollution levels by between .01 and .07 percent, holding constant other factors in the model.
- The average number of certifications in a country in 1995 was 1.2 and by 2005 the average was 522. For some countries, the certification growth rate was above 100% per year.

Conclusions

- ISO: Neither a greenwash, nor a silver bullet
- Efficacy varies across pollution types
- Issue visibility drives firms' environmental stewardship investments

Lessons

- Private regulation operates in the shadow of public law
- Institutional substitutability?
- Don’t work in every context
- Think to model firms as strategic actors pursuing CSR

	SO_2		BOD	
Independent Variables	Coeff.	P-Values	Coeff.	P-Values
.	.	.	.	.
ISO4001	-0.07	0.00	-0.02	0.14
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ISO14001 x Stringency	0.02	0.01	0.01	0.24
.	.	.	.	.
Domestic Controls	.	.	.	.
GDP	0.23	0.21	0.04	0.85
GDP Per capita	-0.00	0.67	0.00	0.01
GDP per capita^2	5.20E-10	0.39	-1.34E-09	0.01
GDP Growth	-0.00	0.72	-0.00	0.80
Industry	0.06	0.48	0.01	0.86
ISO 9001	-0.01	0.31	.00	0.93
Population	0.82	0.00	1.06	0.00
Urban	1.10	0.00	-0.09	0.87
Party Ideology	0.01	0.70	-0.02	0.29
Democracy	-0.01	0.07	0.00	0.75
.	.	.	.	.
International Controls	.	.	.	.
FDI inflows	0.00	0.47	0.00	0.36
FDI Stocks	-0.03	0.34	0.02	0.43
Exports	0.04	0.38	0.12	0.00
Exports-ISO	1.60E+08	0.32	-1.25E+08	0.50
Exports-Pollution	-242968	0.99	-728259	0.67
Exports-Treaty	0.02	0.48	0.00	0.99
Neighborhood	-1.41E+08	0.00	-3.07E+07	0.30
NGO	0.01	0.92	-0.01	0.87
INGO	-0.01	0.62	-0.01	0.16