Discussion of "Check the Box: Does Information on the Existence of Public Climate Disclosure Reduce Federal Suppliers' Emissions? "

A Nudging Perspective

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Summary

- (Mandatory) representation required by FAR 52.223-22 leads to reduction in emission.

- The result is stronger
  - Among suppliers relying more on government contracts.
  - Contract officers can effectively process the information from representation.

- The representation leads to more future government contracts.

Overall

- A new perspective looking at GHG emission: Government as customer

- In-depth empirical evidence

- Enjoyed reading the paper

- My Discussion
  - A few comments on the current analysis
  - A new idea based on the data on author's hands

Comments #1: Main setting

- The paper is actually testing the power of ticker, which is a nudge imposed by government:
  – Low execution cost
  – Not a disclosure mandate
  – No binding for any target
- But unfortunately, it is not random
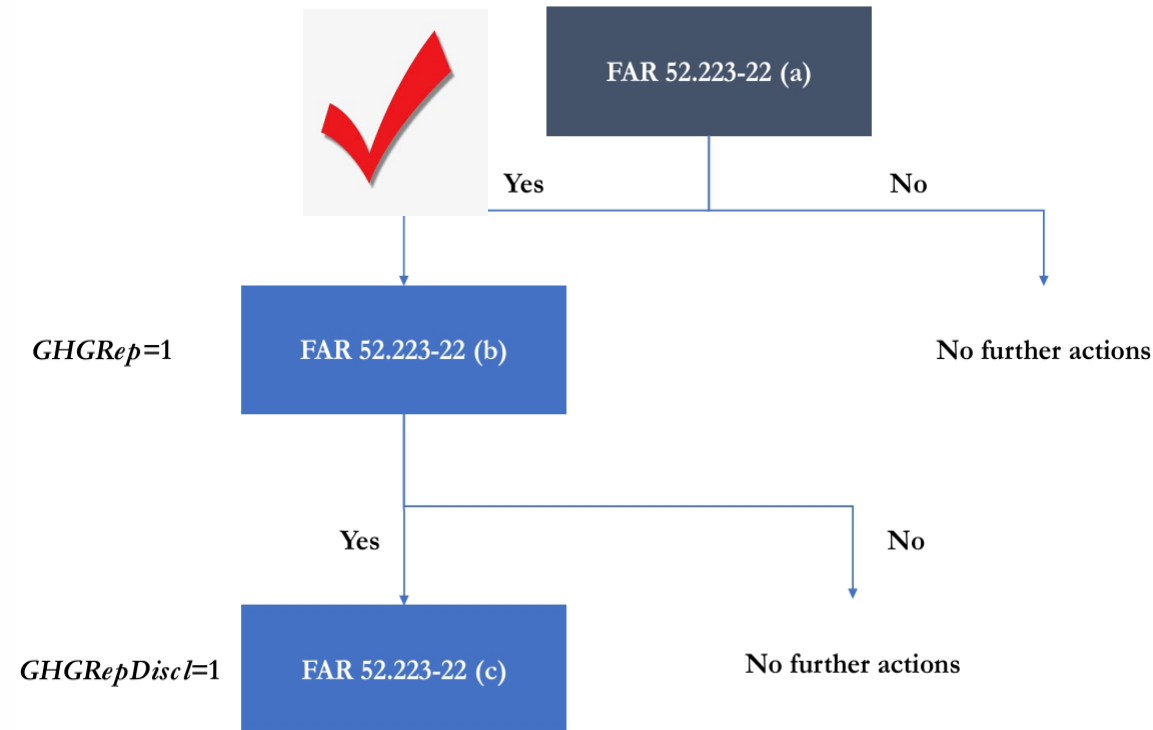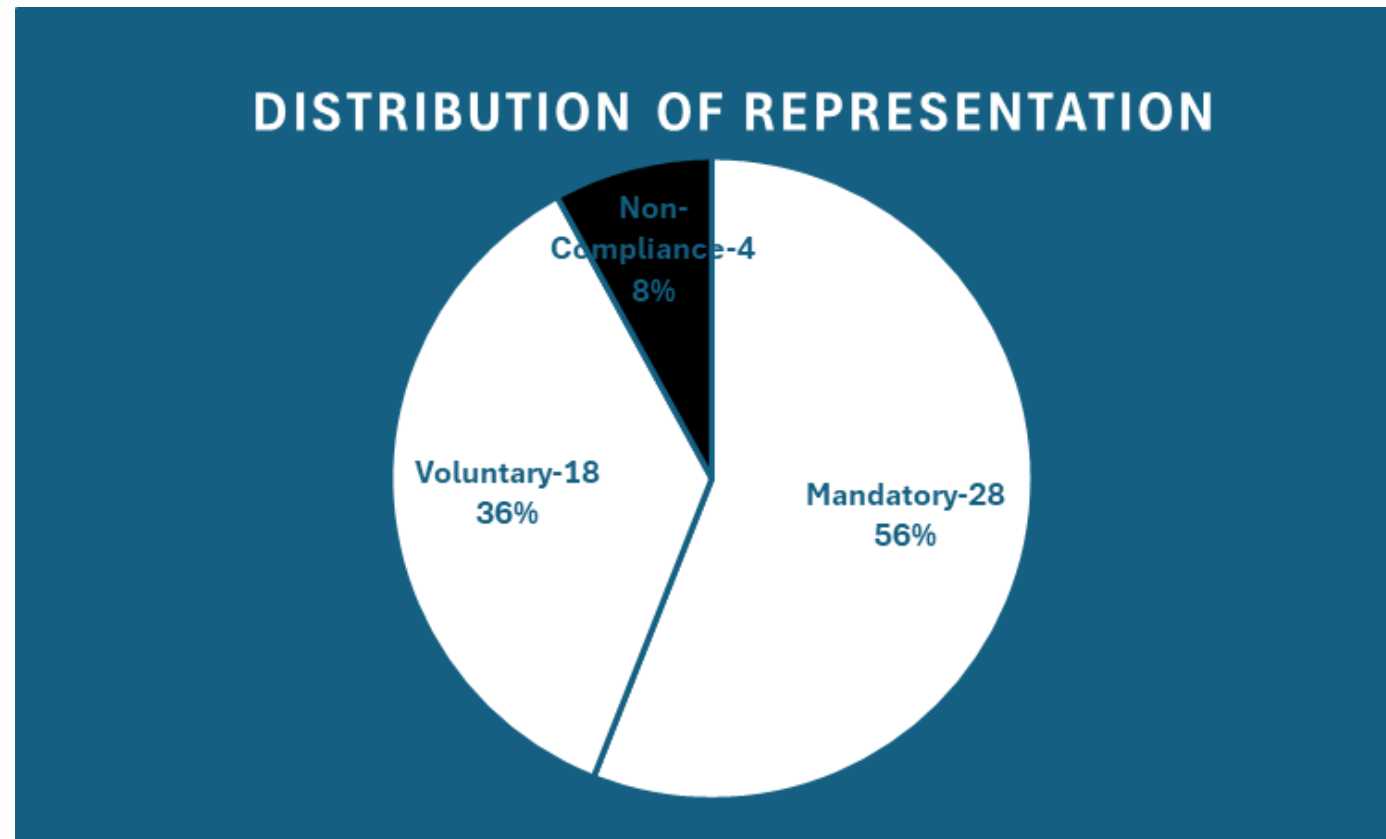 – Mandatory threshold for representation even not for disclosure: $7.5M government contracts in prior fiscal year.

Figure 1: A diagrammatic illustration of the process for making the GHG representation

Comments #1: Main setting

- Sample:390 unique firms;2046 firm-year obs.

DISTRIBUTION OF REPRESENTATION

Non-Compliance-4 8%
Voluntary-18 36%
Mandatory-28 56%

Comments #1: Main setting

- Missing key descriptive information

Before	Emission Level	After
	Mandatory Rep.	
	Voluntary Rep.	
	Non-Compliance	

Comments #2: Main Result

- Table 3A

Table 4B

Dependent Variable =		Log(*GHGEmission*)		
	(1)	(2)	(3)	(4)
GHGRep	-0.132**	-0.138***		
	(-2.349)	(-2.800)		
GHGRep(Mandatory)			-0.130**	-0.148***
			(-2.148)	(-2.801)
Log(1+*SRIProposalsN*)	-0.009	-0.009	-0.037	-0.041	-0.052	-0.055
	(-1.202)	(-1.287)	(-1.232)	(-1.348)	(-1.117)	(-1.184)
GRIReport	0.005	0.005	-0.006	-0.007	-0.031	-0.032
	(0.420)	(0.409)	(-0.126)	(-0.152)	(-0.565)	(-0.584)
PriorGHGPubDis	-0.010	-0.011	-0.043	-0.044	-0.015	-0.016
	(-0.730)	(-0.810)	(-0.830)	(-0.859)	(-0.256)	(-0.277)

Dependent Variable =	Log(*GHGEmission*)
	(1)
GHGRep(Mandatory)	-0.193***
	(-3.247)
GHGRep(Voluntary)	-0.090
	(-1.588)
NoGHGRep(Mandatory)	-0.101
	(-1.155)

None of these conventional ESG variable loads

Comments #2: Main Result

- Endogeneity is an issue since it's not a random process.
  - IV: Can mandate be mechanically associated with mandatory representation? The non-compliance observation may be some data errors.
  - The voluntary representation results:
    - Not reversal causality
    - Simply they do not care
  - Entropy matching for mandatory representation: the mandate is still the key
  - RDD around 7.5M: the sample may be too small?

Comments # 3: Disclosure

- What is impact of representation on disclosure?

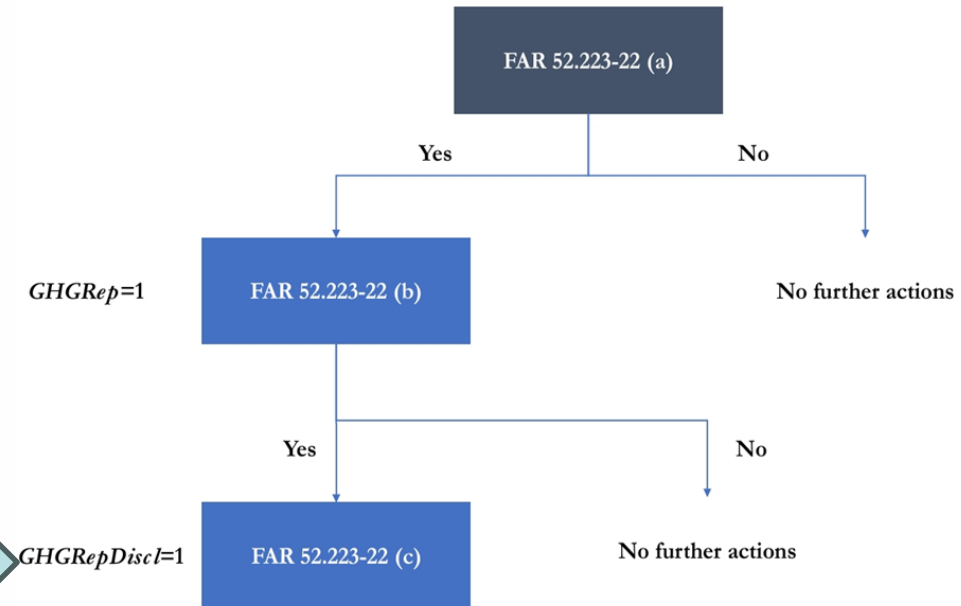Does the publicly disclosed GHG exist before the representation?

Comments # 4: Contracting officer's information processing

- The disclosure offers information to contracting officers, allowing them to evaluate the control of GHG emission by suppliers.
    - Whether the supplier provide (valid) disclosure
- As mentioned earlier, the disclosure can be a commitment by suppliers. They disclose because they are serious about the emission reduction.

Comments # 4: Contracting officer's information processing

- The information processing constraint
  - Lower number of unique entities handled
  - High percentage of UEIs providing representation
- Does this mean that these officer are handling some large/important contracts?

Comments #5: future government contracts

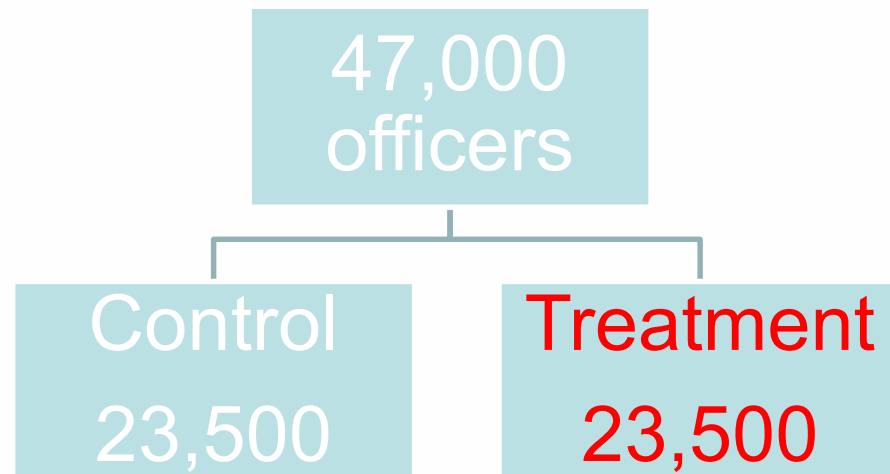| Dependent Variable =	FutureGov Contract		FutureGov ContractValue/Sale		Log(FutureGov ContractN)	
	(1)	(2)	(3)	(4)	(5)	(6)
GHGRep	0.064***		0.003		0.157*	
	(2.685)		(1.597)		(1.816)	
GHGRep(Mandatory)		0.031		0.004*		0.207**
		(1.583)		(1.676)		(2.456)

- The current test can be that the large suppliers continue to grow faster?
- Shall emission reduction be used on the right?

Conclusions

- Describe the sample more carefully
- Take better care of endogeneity if you can
- The disclosure can be an outcome variable
- It's still unclear how contracting officers use the information.

- Why not try a real RCT?

A newly proposed idea using RCT

- Research Question: How do contract officers use emission information from suppliers?

47,000 officers

Control
23,500

Treatment
23,500

Intervention
1. Rank the entities handled by the officer in previous year according to the emission level
2. Identify top 5 green entities and brown entities
3. Email the labelled entity to the officer

Outcome:
The contract of green and brown entity after your treatment

Good luck for the current paper;
Look forward to your RCT paper.