### Does the OECD Anti-Bribery Convention Reduce Bribery?

Nate Jensen (George Washington University) & Edmund Malesky (Duke University) An Empirical Analysis Using the Unmatched Count Technique

## Is the OECD-ABC Successful?

- The OECD Anti-Bribery Convention (the unwieldy official name of which is the "OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions") has proven to be a <u>surprisingly successful international</u> <u>agreement</u>—far more effective than the various regional anticorruption instruments or the U.N. Convention Against Corruption (UNCAC), and indeed far more effective than even the OECD Convention's proponents had predicted.
- Matthew Stevenson (2014), Harvard Law School, writing on the Global Anti-Corruption Blog

## What is the OECD-ABC?

## Two Motivations behind the OECD-ABC

- 1. Host countries for FDI, including many developing countries, did not have the capacity, sophistication, or incentive to combat corruption.
- 2. Unilateral actions by investing countries was impossible due to a global collective action problems. Corruption creates general problems, but any one briber can benefit tremendously.
  - Negotiations over OECD-ABC were triggered by 1988 amendment to the US Foreign Corrupt Practices Act (FCPA), which obligated negotiations with other countries.





# Signatories to Convention

- Argentina
- Martine Australia
- Austria
- Belgium
- Brazil
- Bulgaria
- Elements Canada
- Chile
- Colombia
- Czech Republic
- Denmark

- Estonia
- 📥 Finland 🛛 🔜 Latvia
- Germany
   Mexico
- Greece
- Hungary
- Iceland
- Ireland
- srael
- Italy

- 🔹 🔴 Japan
- France
   Interpretation

  - Metherlands
  - Mew Zealand
  - Norway
  - Poland
  - Portugal
  - Russia

- Slovakia
- Slovenia
- South Africa
- South Korea
- Spain
- Sweden
- Switzerland
- C Turkey
- Inited Kingdom
- United States

### Keys to the OECD-ABC

- <u>Extraterritoriality:</u> Signatories promise to pass domestic laws criminalizing bribery by their firms abroad.
- <u>Working Group:</u> OECD does not directly enforce, but a Working Group monitors the generation of anti-bribery legislation and enforcement.
- <u>Peer Review Process</u>: 1) Two signatory countries lead examination and prepare report; 2) All members read the reports, evaluate performance, and issue recommendations; 3) No single country can prevent publication (consensus minus one).





# Reports can be Scathing

- "The situation in Hungary as it relates to legal persons is problematic. The requirement that a natural person must be punished in order for a legal person to be prosecuted creates a significant loophole by which legal persons can escape liability" (Phase 3 Report).
- "Australia has only one case that has led to foreign bribery prosecutions, out of 28 foreign bribery referrals received by the Australian Federal Police (AFP) ... this is of serious concern" (Phase 3 Report).



## **Timeline of OECD-ABC**

- 1989: Began as an ad-hoc working group
- 1997: Negotiated and passed.
- 1999: Came into force.

### **Peer Review Process**

- **Phase 1 (Evaluation Stage)**, began in 1997; focus was on whether legal documentation developed by the signatories met the standards set by the Convention.
- Phase 2 (Assessment Stage), began in 2002; studied whether the legal texts were being applied correctly and appropriately
- **Phase 3 (Enforcement Stage)**, schedule announced in 12/2009; focus on whether signatory countries were living up to the spirit of the Convention by punishing malfeasance of their citizens and businesses abroad. Represents the onset of the teeth of the OECD-ABC.



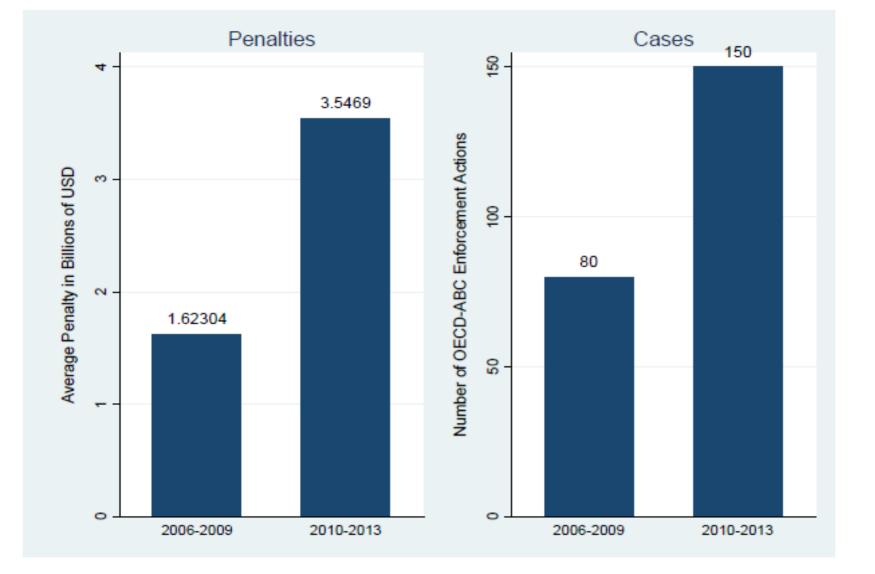


Figure 1: Foreign Bribery Punishments and New Investigations in Signatory Countries in Four Years before and after Phase 3. In the first panel, we present average penalties in anticorruption cases from the OECD Foreign Bribery Report (2014, p. 20, Figure 7). In the second panel, we present the average number of new investigations from the Trace International Report (2014, p.8, Figure 2).

# Hypotheses

- H1: After the onset of Phase 3 (2010) enforcement, firms from countries that signed the OECD-ABC will reduce the frequency of their bribery compared to non-signatories.
- H2: After the onset of Phase 3 (2010), firms from countries that actively enforce the OECD-ABC will reduce the frequency of their bribery compared to non-active enforcers.

### Standard Approach to Evaluating Corruption Policy

1. Do you agree with this statement? "It is common for firms in my line of business to have to pay some irregular 'additional unofficial payments."

- 1. 🗆 Yes
- 0. 🗖 No

2. On average, what percentage of income do firms in your line of business typically pay per annum in unofficial payments to public officials?

- 1. 🗆 0%
- 2. □ From 1% to less than 2%
- 3. From 2% to less than 5%
- From 5% to less than 10%

- 5. 🗆 Less than 1%
- 6. 
  From 10% to less than 20%
- 7. 
  From 20% to less than 30%
- 8. 🗆 Over 30%

### Standard Approach to Evaluating Corruption Policy

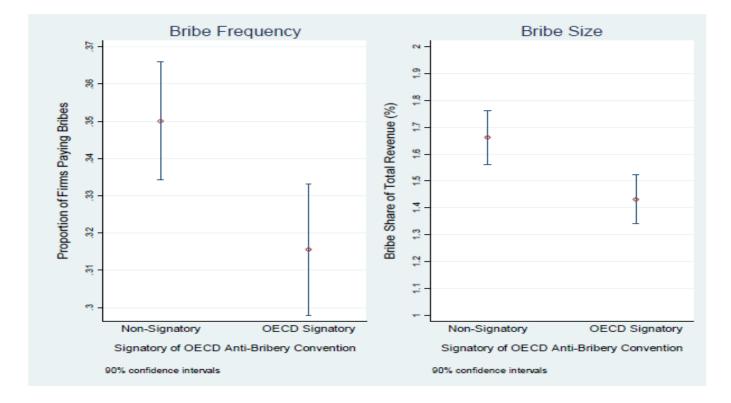


Figure 2: Differences between OECD Anti-Bribery Convention Signatories and Non-Signatories Using Standard Corruption Questions. Data obtained from four years of annual PCI-FDI survey (2010–2013) using questions e11 and e12, which replicate questions j7a and j7b from the World Bank's Enterprise Survey. These graphs show unadjusted differences in means, but the results are robust to multiple regression using firm-level, sector-level, and country-level controls.

### Problem with Standard Approach August 20, 2012

- Nguyen Duc (Bau) Kien, Chairmen of ACB Arrested for corruption.
- ACB widely seen as most successful jointstock bank (49% of shares foreign held)
- Kien closely associated with PM

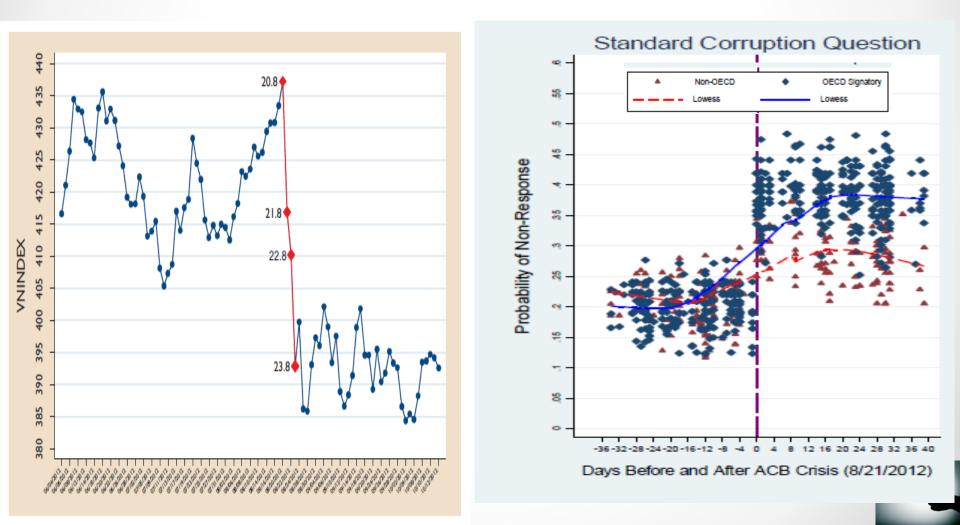




### **Demonstration of Problem 2**

#### Vietnamese Stock Market

**PCI** Survey



## Our Alternative Empirical Analysis Approach

### PCI Data

- Annual business survey used to gauge Vietnamese business environment.
- Use 2010-2013 Foreign Investment Surveys.
- n≈1,500 per year (6,066 overall).
- Sample is stratified by age, legal form, and broad industrial sector.
- 35% response (high for business surveys), but problematic – detailed comparison to underlying population to make sure not biased



### Resolving Problems with Standard Approach

- Use difference-in-differences (diff-in-diff) design around Phase 3 implementation, allowing us to remove the influence of time invariant confounders (democracy, wealth, press freedom).
- 2. Use UCT (list) question to reduce systematic social desirability bias and non-response bias.
- 3. Take advantage of variance in time of firm entry, timing of government contract, and type of bribery.



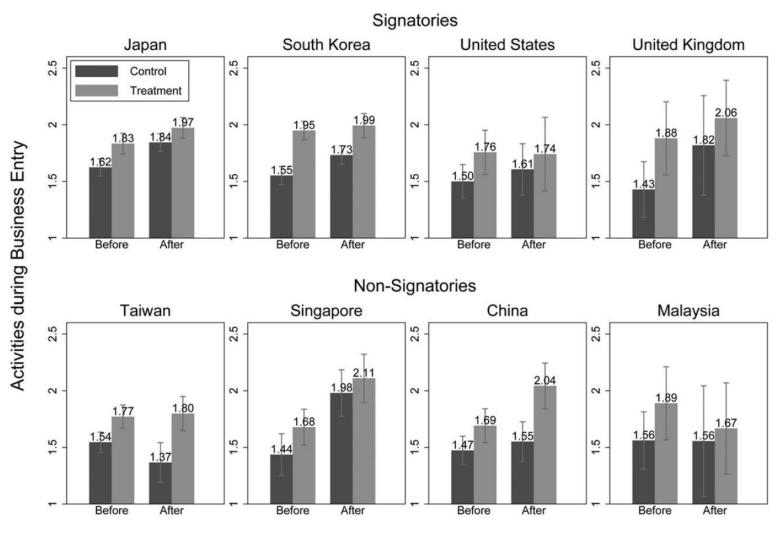
### Toward a Precise Method of Measuring Corruption

- Unmatched Count Technique (UCT, LIST) Question (Raghavarao and Federer, 1979).
- On one form, respondents are asked how many innocuous but relatively infrequent activities they participated in over a clearly defined time period and location.
- The second group of respondents receives the same list of innocuous items as well as an additional sensitive item.
- Respondent only must recall the number of activities they engaged in and must never admit to sensitive behavior.
- Aggregation protects privacy and shields complicity.
- The difference in means between the two forms provides the proportion of respondents participating in the sensitive action.
- The technique has been shown to provide the most accurate and confidential assessments of sensitive activity in repeated testing (Couts and Jann 2009).
- Estimate (Probability of Bribery) = Mean (Form A) Mean (Form B)

UCT Question 1: Please take a look at the following list of common activities that firms engage in to expedite the steps needed to receive their investment license/registration certificate. How many of the activities did you engage in when fulfilling any of the business registration activities listed previously?

- Followed procedures for business license on website.
- Hired a local consulting/law firm to obtain the license for the firm for you.
- Paid informal charge to expedite procedures.
  - (Only Available on Form B of the Survey)
- Looked for a domestic partner who was already registered.

Treatment	Mean	SE	Low	High	Bribe	
No	1.421	0.02	1.38	1.46	20.3%	
Yes	1.624	0.02	1.58	1.67	20.3%	



Range bars=90% CI

Notes: Responses are grouped by signatory status and entry before or after Phase 3.

### Difference-in-Means: Before and After Phase 3 Onset

3. Before Phase 3 by OECD Anti-Bribery Convention Signatory Status							
OECD	Treatment	Mean	<u>SE</u>	Low	High	Bribe	
No	No	1.370	0.03	1.31	1.43	18.6%	
No	Yes	1.556	0.03	1.49	1.62	10.070	
Yes	No	1.437	0.03	1.38	1.50	23.7%	
Yes	Yes	1.674	0.03	1.61	1.74	23.7 70	
4. After Phase 3 OECD Anti-Bribery Convention Signatory Status							
OECD	<b>Treatment</b>	Mean	<u>SE</u>	Low	<u>High</u>	Bribe	
No	No	1.339	0.11	1.11	1.56	40.7%	
No	Yes	1.746	0.12	1.51	1.99	40.770	
Yes	No	1.548	0.07	1.41	1.69	11.5%	
Yes	Yes	1.664	0.09	1.48	1.85	11.5%	

### Multiple Regression using LIST Method

1.  $y_{it} = \gamma_0 + \gamma_1 OECD_{it} + \gamma_2 Phase3_{it} + \gamma_3 OECD * Phase3_{it} + C_{it} + \lambda + \alpha + e_{it}$  if treatment=0 (negative binomial regression) 2.  $g_{it} = (y_{it} - \hat{y}_{it}) = \delta_0 + \delta_1 OECD_{it} + \delta_2 Phase3_{it} + \delta_3 OECD_{it} * Phase3_{it} + C_{it} + \lambda + \alpha + e_{it}$  if treatment=1 (non-linear least squares)

Dependent variable: difference between the	0	All Firms				
activities reported by treatment group and predicted number of nonsensitive activities of	Diff-in- Means	No Controls	Survey Year FE	Sector FE	Firm & Country <u>Controls</u>	Country & Entry Year FE
control group.	(1)	(2)	(3)	(4)	(6)	(8)
Firm <b>Entered</b> after Home Country Completed Phase		0.224*	0.260**	0.248**	0.168	
		(0.123)	(0.132)	(0.099)	(0.129)	
Signed OECD Bribe Convention =1		0.055	0.070**	0.088**	0.258*	
		(0.039)	(0.035)	(0.035)	(0.149)	
OECD*Phase3		-0.346**	-0.343**	-0.352***	-0.273*	-0.410*
		(0.168)	(0.165)	(0.129)	(0.146)	(0.218)
Constant	0.203***	0.184***	0.077	-0.040	0.004	-0.934***
	(0.040)	(0.045)	(0.049)	(0.145)	(0.476)	(0.316)
Observations	2,116	2,041	2,041	2,032	1,312	1,347
Provincial Clusters	50	49	49	49	44	44
RMSE	0.978	0.968	0.949	0.946	0.927	0.931
Log-Likelihood	-2955	-2828	-2785	-2752	-1741	-1767
LR Chi2 Test	NA	253.9***	339.2***	405.4***	2422***	4399.6***
BIC	5917	5686	5623.5	5770.6	3588	1687.9

#### Table 2: Correlates of Corruption During Business Entry (LIST Method)

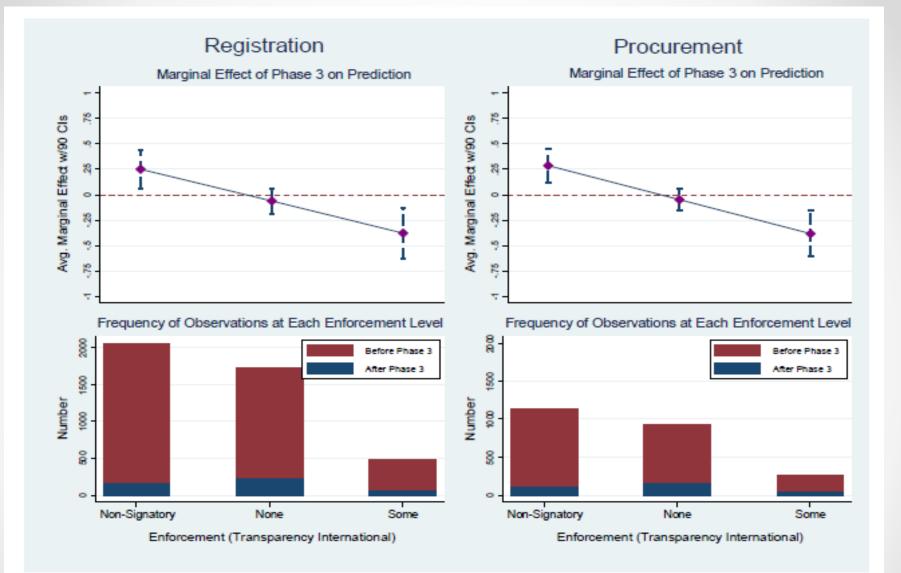
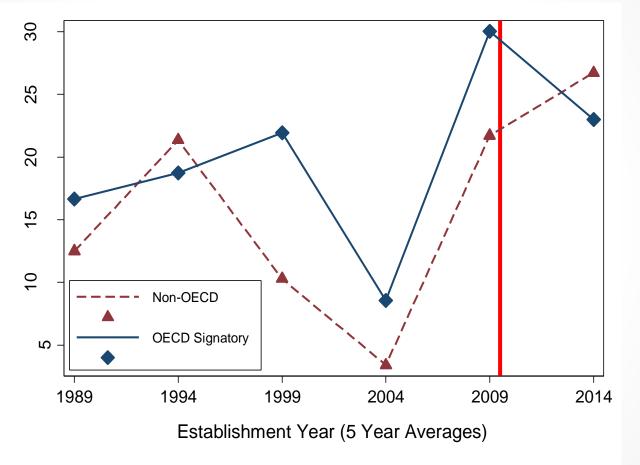


Figure 3: Conditional Effect of Enforcement on Reductions in Bribe Propensity. Based on Models 5 and 10 in Table 4. Number of observations in histograms include both first and second stages.

# Sensitivity Tests

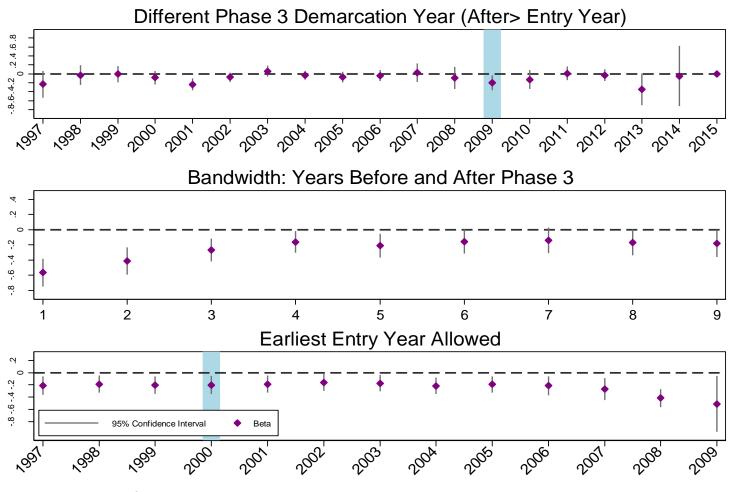
- 1) The parallel trends assumption;
- 2) Bandwidth size;
- 3) Repeated cross-sections versus panel estimation; a
- 4) Robustness to bribery in procurement

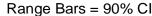
## **Parallel Trends Assumption**



Bar denotes start of OECD-ACB Phase 3 after December, 2009

## **Parallel Trends Assumption**





## Conclusions

- Critically important debate over extra-territoriality as solution to global bribery
  - Previously empirical analysis insufficient
- Resolve problems using research design less prone to selection bias and a measure of corruption less prone to systematic measurement error.
- We find that:
  - Merely signing onto the Convention had no impact on bribery.
  - Only after serious monitoring in <u>Phase 3</u> of the Convention do we see a divergence in bribery behavior.
  - Similar findings for informal payments during business registration, or bribery engaged in during procurement.
  - Firms from OECD-ABC signatories, and especially the countries with the strongest enforcement, engage in less corruption relative to firms from non-signatory countries, even after controlling for non-random selection into the OECD-ABC.

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