

# **RENEGOTIATIONS AND CORRUPTION IN INFRASTRUCTURE**

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June 14, 2021.

## BASED ON JOINT WORK WITH N. CAMPOS, R.FISCHER AND A.GALETOVIC

Papers:

1. "The Ways of Corruption in Infrastructure: Lessons from the Odebrecht Case." *J. of Economic Perspectives*. Spring 2021.
2. "Renegotiations and Corruption in Infrastructure: The Odebrecht Case." Working paper.

Policy reports from “Programa para mejorar la infraestructura pública en América Latina”.  
Espacio Público for Corporación Andina de Fomento (CAF).

1. “Gobernanza del sector de infraestructura pública”.
2. “Descripción y análisis de la información pública sobre el Caso Odebrecht”.
3. “Entrevistas a agentes clave en los procesos de provisión de infraestructura pública en América Latina”.
4. “Recomendaciones para reformar el sector de infraestructura pública”.

## CORRUPTION AND INFRASTRUCTURE

Little direct evidence.

Magnitude of bribes:

- ▶ Between 5 and 30% of construction costs

Quid pro quos:

- ▶ Looting the treasury?
- ▶ Taylor made auction?
- ▶ Extortion?
- ▶ New: Advantageous renegotiations?

Research reported in this presentation:

- ▶ New evidence from the Odebrecht case.
- ▶ Plea agreements (100+).
- ▶ Media reports.
- ▶ Government sources.

Odebrecht Case

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## THE ODEBRECHT CASE

Odebrecht:

- ▶ Brazilian conglomerate: engineering, construction, chemicals and petrochemicals.
- ▶ Sales quintupled between 2005 and 2009.
- ▶ 2009: Latin America's largest engineering and construction company, No. 18 worldwide.
- ▶ World's Best Family Business (IMD, 2010)

Corruption scandal:

- ▶ Uncovered as part of the Lava Jato / Petrobras investigation, but different.
- ▶ Largest case ever (profits, bribes) prosecuted under the US FCPA.
- ▶ 200 politicians and public officials bribed, 76 Odebrecht executives jailed.
- ▶ One former president jailed (Lula), another on the run (Toledo), another resigned (Kuzcynski), another committed suicide (García), ...



*Table 1*  
**Top Ten Foreign Corrupt Practices Act Cases: Gross Profits from Bribes**  
*(in millions of US dollars)*

<i>Case</i>	<i>Countries</i>	<i>Gross profits from bribes<sup>a</sup></i>	<i>Amount of bribes paid</i>	<i>Total fine<sup>c</sup></i>	<i>Countries to which fines were paid</i>
Odebrecht (2001–2016)	Angola, Argentina, Brazil, Colombia, Dominican Republic, Ecuador, Guatemala, Mexico, Mozambique, Panama, Peru, Venezuela	3,336	788	2,600	Brazil, Switzerland, United States
Siemens (1996–2007)	Argentina, Bangladesh, China, Iraq, Israel, Mexico, Nigeria, Russia, Venezuela, Vietnam	1,100 <sup>b</sup>	1,400 <sup>b</sup>	1,600	Germany, United States
Societe Generale and Legg Mason (2004–2011)	Libya	523	91	860	France, United States
Keppel (2001–2014)	Brazil, Iraq	500	55	422	Brazil, Singapore, United States
Ericsson (2000–2017)	China, Djibouti, Indonesia, Kuwait, Saudi Arabia, Vietnam	458	150	1,060	United States
Telia (2007–2012)	Uzbekistan	457	331	965	Netherlands, Sweden, United States
Alstom (2000–2010)	Bahamas, Egypt, Indonesia, Saudi Arabia, Taiwan	296	75	860	United States
Teva (n.a.)	Mexico, Russia, Ukraine	221	n.a.	541	United States, Israel
Total (1995–2005)	Iran	150	60	398	United States
Fresenius (2009–2016)	Angola, Benin, Bosnia and Herzegovina, Burkina Faso, Cameroon, China, Gabon, Ivory Coast, Mexico, Morocco, Niger, Saudi Arabia, Senegal, Serbia and Montenegro, Spain, Turkey	140	30	232	United States

## Impact:

- ▶ Economic: large infrastructure projects delayed, growth fell significantly (Peru, Brazil).
- ▶ Political:

*“From Mexico to Brazil, the Odebrecht scandal helped push corruption to the center of public debate. It also bolstered a widespread revolt against political and business elites — a decisive element in most of the elections held in Latin America over the past two years.”*

Roberto Simon, *America's Quarterly*.

## US DOJ - ODEBRECHT PLEA AGREEMENT

Country	Bribes (\$MM)	Gross profits (\$MM)	Initial Cost	Period	Number
Argentina	35	278	4,141	2007-2014	6
Colombia	11	50	1,828	2009-2014	4
Dominican Republic	92	163	4,588	2001-2014	16
Ecuador	33.5	116	3,466	2007-2016	10
Guatemala	18	34	384	2013-2015	1
Mexico	10.5	39	2,155	2010-2014	6
Panama	59	175	8,839	2010-2014	20
Peru	29	143	14,904	2005-2014	25
<b>Brazil</b>	<b>349</b>	<b>1900</b>	<b>66,080</b>	<b>2004-2016</b>	<b>105</b>
<b>Total</b>	<b>637</b>	<b>2,898</b>	<b>106,384</b>	<b>2001-2016</b>	<b>193</b>
Angola	50	261.7	n.a.	2006-2013	n.a.
Mozambique	0.9	n.a.	n.a.	2011-2014	n.a.
Venezuela	98	n.a.	n.a.	2006-2015	n.a.
<b>Total (all ctries.)</b>	<b>786</b>	<b>3160</b>	<b>49,103</b>	<b>2001-2016</b>	<b>90</b>

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## CASE STUDY: RUTA DEL SOL (COLOMBIA)

528km highway from Puerto Salgar to San Roque

Tailored auction:

- ▶ Odebrecht paid \$6.5MM to the Vice-Minister of Transportation to include discretionary pass/fail qualification: experience, financial capacity and legal documentation requirements.
- ▶ One rival failed on the experience requirement, the remaining rivals on all three.
- ▶ Odebrecht bid close to the maximum allowed because it expected to be the only bidder.

### Contract renegotiation:

- ▶ Odebrecht paid \$4.6MM to a lobbyist to bribe officials and politicians. to add another highway to the original project without open tender: Ocaña-Gamarra.
- ▶ Despite an opinion from the National Comptroller indicating a new project was needed.
- ▶ Bribed Senate Budget Commission member in charge of approval of addition.
- ▶ Also renegotiated original contract ten times: added toll plazas and increased tolls by 15%.

## QUID PRO QUOS

Tailored bidding process	Favorable renegotiation	Extortion	Number
Yes	Yes	Yes	1
Yes	Yes	No	19
Yes	No	Yes	6
Yes	No	No	20
No	Yes	Yes	1
No	Yes	No	9
No	No	Yes	1
No	No	No	5
46	30	9	62



## RENEGOTIATIONS (COST INCREASE): MUCH LARGER WITH BRIBES

All projects in 8 countries in Latin America over period covered by plea agreement with US DOJ.

		<u>Evidence on bribes</u>	
		Legal	Legal or Media
<u>No bribes</u>	Number of projects:	43	26
	Simple Avge.:	23.3%	16.3%
	Weighed avge:	10.9%	<b>5.6%</b>
<u>Bribes</u>	Number of projects:	45	62
	Simple Avge.	68.6%	59.1%
	Weighed avge.	84.9%	<b>70.8%</b>

## RENEGOTIATIONS (COST INCREASE): BRAZIL

105 projects for which we were able to find information on cost increases.

		<u>Evidence on bribes</u>	
		Legal	Legal or Media
<u>No bribes</u>	Number of projects:	34	33
	Simple Avge.:	6.9%	6.2%
	Weighed avge:	6.2%	<b>4.1%</b>
<u>Bribes</u>	Number of projects:	71	72
	Simple Avge.	24.6%	24.5%
	Weighed avge.	18.8%	<b>18.9%</b>

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## **BRIBES AND PROFITS (FROM BRIBES AND OVERALL): SMALL RELATIVE TO COSTS**

	Number	Bribes/ Final Costs	Profits from Bribes/ Final Costs
Bribes (legal):	45	0.98%	2.41%
Bribes (legal/media):	62	0.79%	1.95%
All projects:	88	0.51%	1.26%

Overall profits (2004–2014): \$2.4 BN over sales of \$287 BN

Profits from bribes (DOJ: \$2.37BN) similar to overall profits

Can we trust the numbers on overall profits?

- ▶ DOJ fine: from \$4.5 BN to \$2.6 BN.
- ▶ Forbes: Odebrecht family's net worth (Forbes): \$4-6 BN

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## ODEBRECHT INNOVATED IN BRIBING

2006: Odebrecht creates the Division of Structured Operations (DSO)

- ▶ 3 executives + 4 secretaries dedicated to paying bribes into foreign accounts

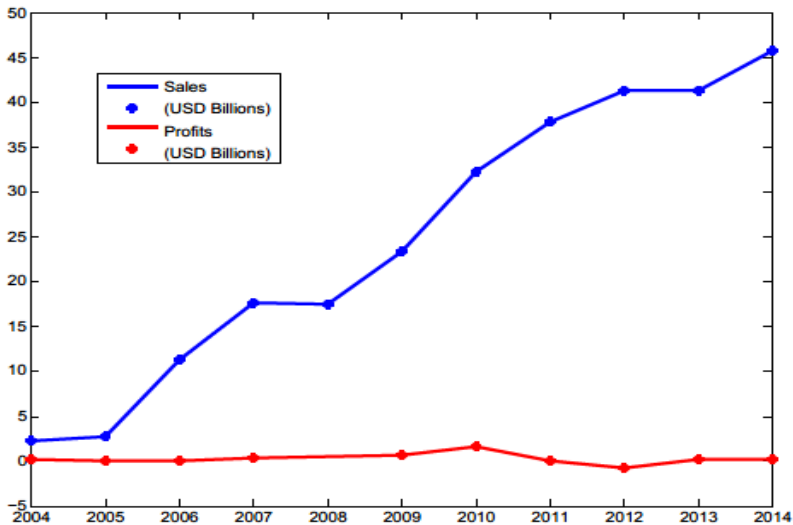
DOJ on DSO:

*“to conceal its activities, the Division of Structured Operations utilized an entirely separate and off-book communications system [...] to communicate with one another and with outside financial operators [...] via secure emails and instant messages, using codenames and passwords.”*

From suitcases with money to the DSO:

- ▶ major reduction in ‘leakage’
- ▶ major reduction in recipients’ cost of hiding bribes

## ODEBRECHT: MAJOR INCREASE IN SALES, BUT NOT IN PROFITS



## FACTS AND MODEL

Some facts lead to assumptions:

- ▶ small profits and large renegotiations: competitive auction where firms anticipate (and dissipate) the rents they will obtain when renegotiating (fundamental transformation)

Some facts are explained by the model:

- ▶ the connection between bribes, lowballing and renegotiations
- ▶ why the creation of the DSO increased sales but not profits

And the model predicts some new facts/insights:

- ▶ magnitude of Odebrecht's advantage in bribing
- ▶ focus of reforms to reduce corruption in infrastructure

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## POLICY IMPLICATIONS

Competition in the award stage:

- ▶ public officials are constrained by check and balances
- ▶ small profits, small bribes

Post-tender governance does not work:

- ▶ both for public provision and for PPPs

Reform:

- ▶ competitive tenders for additional works, that exclude the firm
- ▶ independent review of renegotiations
- ▶ Chile's reform of the PPP law of 2010 includes both measures, was followed by a 90% reduction in renegotiations

## SUMMARY

1. Conditional on paying bribes, renegotiations (cost increases) were about ten times larger.
2. Bribes were small relative to costs.
3. Profits (from bribes and overall) were small relative to costs.
4. Odebrecht innovated in bribe management by creating the DSO.
5. The creation of the DSO was followed by a dramatic increase in Odebrecht's market share, yet profits remained low.
6. Policy implications: focus on post adjudication stage.

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