

23. Case study: the Odebrecht corruption case

The Odebrecht case of 2015 was a corruption case which affected ten countries in Latin America as well as two in Africa. It had important consequences: Odebrecht was fined \$2.6 billion by the United States Department of Justice (US DOJ), the largest fine ever imposed under the Foreign Corruption Practices Act of 1977. Moreover, it led to the imprisonment of Marcelo Odebrecht, CEO of the company, and had severe economic and political impacts in several countries.

The Brazilian company Odebrecht was the largest engineering and construction firm in Latin America, with sales of \$45 billion in 2013, the year previous to the start of the investigations that eventually led to the Odebrecht case. It started as an investigation of money laundering, the so-called Lava Jato case. It evolved into a corruption scheme involving executives in Petrobras, the Brazilian oil giant. From there the investigations led to Braskem, the largest petrochemical company in Latin America, controlled by Odebrecht, and to Odebrecht itself. The investigations found a network of corruption that encompassed not only Brazil, but most of the countries in which Odebrecht operated.

The political fallout of the case included the resignation, legal prosecution, or suicide of five Peruvian presidents as well as the resignation and prosecution of many other politicians in Brazil and in the rest of Latin America. Latin American infrastructure projects worth tens of billions of dollars were paralyzed for long periods, and most were eventually transferred from Odebrecht to other companies. The reverberations of the case affected the politics and economies of most of Latin America for several years.

According to Gaspar [2020], corruption was endemic to the Brazilian engineering and construction business. Since its beginnings in the 1940s, Odebrecht had been adept at giving handouts to politicians. The company grew at a steady rate until the early 2000s, becoming one of the larger Brazilian engineering companies, with interests in the oil sector, among others. However, the period of fastest growth

followed the creation of the Division of Structured Operations (DSO) in 2006. It was a unit dedicated solely to corruption and bribes, with its own personnel, information management, and communications systems, as well as separate sources of funds and budget. The DSO reported directly to Marcelo Odebrecht, and his personal approval was required for the larger bribes.

The US DOJ participated in the investigation because subsidiaries of Odebrecht had raised funds in the financial markets in the US. This allowed the DOJ to be part of the international investigations that eventually led to a plea agreement signed by Marcelo Odebrecht, after spending several months in prison.¹ In his confession, Marcelo Odebrecht acknowledged that Odebrecht had paid \$788 million in bribes since the creation of the DSO, describing the projects it had participated in and the bribes paid in various countries.² The plea agreement also estimates that gross profits from bribes during the period amounted to \$3.34 million, which leads to net profits of approximately \$2.55 billion, an amount which is close to the profits of Odebrecht during the period.

In Campos et al. [2021] we use the information in the Odebrecht-DOJ plea agreement, plus information gathered from the press, judicial reports, and government sources of the countries involved, to estimate bribes, profits from bribes, and the associated cost increases, all at the project level. We also estimate the relation between cost increases and bribes.

The eight countries for which there is complete data (Argentina, Colombia, Dominican Republic, Ecuador, Guatemala, Mexico, Panama, and Peru)³ had 88 Odebrecht projects during the period covered by the plea bargain with the US DOJ.⁴ Bribes were paid in 62 of these projects and the total cost of all projects (with and without bribes) increased by 40 percent of the initial contract cost.

Bribes and their purpose

As the literature has shown (Huang and Xia [2019]; Tran [2009]; Burguet and Perry [2007]; Burguet and Che [2004]), using subjective criteria in auctions can easily lead to corruption. Odebrecht used bribes to change the weights of the auction criteria in its favor, to have the evaluation commission award it the highest score in technical variables or

disqualify competitors by awarding them lower values on those variables. An example is the project of a large water reservoir in Ecuador. Odebrecht paid \$6 million to the president of the tender commission to bias the results in its favor. Other examples of this strategy appear in Campos et al. [2021].

Another approach used by Odebrecht was to use bribes as a quid pro quo for future renegotiations of the contract. In Campos et al. [2021] we show that the cost increases due to renegotiations in projects where bribes were paid was much higher than in projects with no bribes. Consider Odebrecht's projects in Latin America (excluding Brazil and Venezuela) for which legal documents show the existence of bribes. The increase in costs in those 45 projects due to renegotiations was 84.8 percent. In those cases in which no (legal) evidence of bribes can be found, the increase was only 10.9 percent. In the case of Brazil, the increase in final cost (after contract renegotiations) was 18.8 percent in cases with bribes, versus 6.2 percent in the case without bribes.⁵

A clear example of this behavior is the Via Costa Verde-Tramo Callao project in Peru. The rules required that, to be valid, a bid had to be within 10 percent of a reference value set by the Ministry of Finance. Odebrecht paid \$4 million to the governor of Callao to raise this reference value, something the official was unable to do. However, he promised to help in future contract renegotiations. After eight renegotiations, the total cost of the project increased by 55 percent.

Another common strategy was to add supplementary works to the original project. Since there is no competition at the post-award stage, these additional projects are very profitable. In the Linea Noroeste aqueduct in the Dominican Republic, Odebrecht bribed two consecutive Directors of the Water Works, as well as the President of the Senate, to add works that increased the value of the project from \$161 million to \$250 million.

Furthermore, at times Odebrecht would combine these strategies, both bribing to tailor the auction in its benefit, and then bribing to obtain better terms in renegotiations. In the Ruta del Sol, an important highway in Colombia, Odebrecht bribed the Vice Minister of Transportation to tailor the auction, so all other potential bidders were excluded. In addition, it paid a former congressman to bribe government officials and

politicians, so they would add a new road to the original contract, as well as new toll plazas and higher tolls. The value of the project to Odebrecht increased by 25 percent, with a final cost of \$1.25 billion. Other examples appear in Campos et al. [2021].

The DSO and Odebrecht

The creation of the Division of Structured Operations was part of Odebrecht's growth strategy.⁶ The impact of the specialized bribing division was a rapid expansion of Odebrecht's sales across Latin America and Africa. Construction revenues increased from \$2 billion in 2003 to \$16 billion in 2016. Its rank among worldwide construction companies rose from 31st largest company to 6th largest by 2016.

However, this rise in sales was not accompanied by an increase in profitability, which stayed relatively low over the whole period. Contrary to estimates that show that bribes in the construction sector represent between 5 and 20 percent of project costs (Collier et al. [2016]; Kenny [2009]; Olken [2007]), in the case of the large projects involving Odebrecht, bribes were, on average, less than 1 percent of the cost of the projects (see table 5 in Campos et al. [2021]). Apparently, Odebrecht made small or no profits in projects which involved no bribes, reflecting that competition for projects was intense. Note, however, that even with this low level of project profitability, the return on equity was a more reasonable 11.3 percent.

It seems surprising that even with bribes, the profitability of Odebrecht could be so low as a fraction of revenues. Odebrecht is not an example of the empire-building arguments of Jensen and Meckling [1976], because it was owned and managed by the owners.

An alternative explanation appears in Campos et al. [2020]. There we show that when there is intense competition for projects, firms lowball their bids, in the expectation of renegotiations to recover the initial losses. Thus, the increase in project costs due to renegotiations only recovers the standard profitability of projects, since the initial award of the project was below cost. An increase in bribing efficiency (due to the DSO) is not reflected in an increase in profitability, but in an increase in the projects won by the firm, and therefore in revenues.

Policy implications

Multilateral organizations have been pushing for open auctions for public works for decades. Often, they make it a precondition for participating in the finance of an infrastructure project. This push has led many countries to include a legal obligation of open auctions and transparency when contracting public works. Knack et al. [2019] in a survey of 88 countries show that more transparency leads to more participation in auctions because bribes are smaller and often not required to win a project. However, subjective scores in auctions are still vulnerable to bribing. In countries with corruption problems, it is preferable to award projects to the minimum bid (after a transparent selection of acceptable bidders).

The Odebrecht case shows that post-tender renegotiation can diminish some of the advantages of open auctions. Bribes can be used to obtain better terms in future renegotiations of the contract, allowing bribing firms to underbid firms that do not bribe. As described in Williamson [1979], after a long-term contract is awarded, there is scope for contract renegotiations. In ex post bargaining, the private party does not face competition and bribes can bias the agreement point in favor of the firm. Bribes can also encourage auctions for underspecified projects that provide more opportunities for contract renegotiation.

This suggests that additional scrutiny and transparency of contract renegotiations is needed in many countries. Public exposure of biased renegotiation results leads to more equitable results in renegotiations. This in turn makes bribing less valuable, reducing the extent of underbidding. Moreover, requiring that projects are auctioned at a late design stage leaves less scope for renegotiations and therefore, for corruption. The extent to which countries should follow these proposals depends on the quality of governance. As shown by Bosio et al. [2022], in well-governed countries, there is more leeway for discretion and for auctioning early-stage projects. Ex post renegotiations can improve projects, without leading to corruption. In countries with weaker governance, having less discretion – that is, auctioning late-design projects – reduces the scope of corruption and leads to more efficient outcomes.

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Notes

1. Odebrecht Plea Agreement, Department of Justice.
2. Gaspar (op. cit., p. 695) claims that there were an additional \$250 million in bribes by Braskem, the oil and gas engineering and construction company. Odebrecht owned 38.3 percent of Braskem in 2010 and controlled it through two paper companies (Offering Memorandum, Odebrecht Finance Ltd., \$500,000,000 of 7.5 percent Perpetual Notes, September 7, 2010, p. 6).
3. The data on projects is complete only for these countries. Campos et al. [2021] kept the data for Brazil separate because it was not complete. There was no credible data for Venezuela.
4. The exact period varies across countries, with an average of eight years somewhere between 2001 and 2014.
5. As mentioned above, Campos et al. [2021] kept the data for Brazil separate because it was not complete.
6. In his collaboration agreement with the US DOJ, Hilberto Marscareñas Alves Da Silva Filho (former Chief Executive of DSO) states that “there was an area in the company in charge of bribe payments before the creation of DSO. The payments were made in smaller proportions [. . .] In the second half of 2006, Marcelo (Odebrecht) had a growth plan for the organization with the consequent significant increase in the volume of bribes. Therefore, he wanted to set up an area that would centralize and have total control of these payments, as well as operate in a secure manner, using as few people as possible and without moving funds from bank accounts in Brazil.”

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