

Working Paper 36

Revealing the networks behind corruption and money laundering schemes

An analysis of the Toledo-Odebrecht case using social network analysis and network ethnography

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About this Working Paper

This research publication is part of the Basel Institute on Governance Working Paper Series, ISSN: 2624-9650.

The paper connects the work of the Basel Institute's Public Governance team and its International Centre for Asset Recovery (ICAR). The [Public Governance](#) team conducts research on the root causes of corruption, develops evidence- and network-based anti-corruption approaches and provides training and technical assistance on relevant political and social aspects. [ICAR](#) provides hands-on, technical support to developing and transition countries, including across Latin America, to reduce corruption and recover stolen assets. Its assistance comprises case advice, training, institutional strengthening, international cooperation and policy advice.

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Suggested citation: Costa, J., 2021. *Revealing the networks behind corruption and money laundering schemes: an analysis of the Toledo–Odebrecht case using social network analysis and network ethnography*. Working Paper 36, Basel Institute on Governance. Available at: <https://baselgovernance.org/publications/working-paper-36-revealing-networks-behind-corruption-and-money-laundering-schemes>

1 Introduction

This working paper is based on an empirical investigation of corruption and illicit exchange related to the so-called “Lava Jato” or “Odebrecht” scandal. Focusing on former Peruvian President Alejandro Toledo and his laundering of bribes obtained from the construction giant Odebrecht, the case serves as an indicative example for many similar cases in Latin America and beyond. The analysis aims to test the usefulness of applying a network lens to better understand the mechanisms underlying grand corruption cases. It also aims to further illuminate the nexus between corruption and money laundering and the role of hidden and offshore financial infrastructures in facilitating the illicit schemes.

Over the past decade, we at the Basel Institute and many others have observed how these infrastructures have become central in facilitating corruption and other financial crime at the global level. Offshore vehicles are used to conceal the illicit connections between business people, politically exposed persons and their accomplices. So-called secrecy jurisdictions and service providers, such as financial intermediaries, lawyers, bankers and accountants, have emerged as constant actors in corruption and money laundering cases of all types, all over the world. Despite this, there remain large gaps in our understanding of the nexus between corruption and money laundering and the structures, functions and mechanisms that are at play in enabling those crimes.

The research used a combination of social network analysis and network ethnography techniques to explore the following questions:

- How do money laundering activities and offshore financial infrastructures sustain corruption?
- Who are the key actors involved, how do they interact and what is their division of labour?
- How do actors and clusters govern the social-financial web of relations?

Answering these questions with empirical evidence related to a specific case makes it possible to better understand how the connection between corruption and money laundering using offshore financial infrastructure works. It also supports the emerging

understanding of corruption as a collective, transnational and financially advanced phenomenon.

The analysis uses publicly available data from the Lava Jato and Ecoteva investigations in Brazil and Peru, including judicial documents, newspaper articles and public reports by authorities and civil society organisations. It deconstructs the illicit scheme's mechanisms step-by-step, uncovers the functions undertaken by different actors and clusters, and illuminates the social norms and informal governance practices that regulate the exchange.

Its findings have broad relevance to policymakers, law enforcement officials and other anti-corruption practitioners, as well as to academics seeking empirical evidence on the structural and functional characteristics of the nexus between corruption and money laundering in the contemporary world. The research highlights the manner in which the financial infrastructures of the private and public spheres are smoothly integrated, thanks to the dense social-financial complex where service providers and offshore spaces play an essential role. Furthermore, the study sheds light on the system of informal governance that the actors (individually and grouped in clusters) design and implement to regulate the operations of the transnational corruption network.

Although focused on a specific geographical context, i.e. Brazil and Peru in Latin America, both the findings and especially the method are relevant for the study of corruption and money laundering in other countries and regions, as well as for other forms of illicit exchange such as the illegal trades in wildlife, humans, drugs and arms. More research is urgently required.

The paper is structured as follows. Section 2 explores relevant literature on corruption and money laundering, with a focus on offshore financial centres and structures. Section 3 presents the Toledo-Odebrecht case study. Section 4 describes the empirical analysis that was conducted and presents the main results. Section 5 discusses the implications of these findings and concludes. Details of the methodology and data are included in Annex I.

2 Literature review

The literature in the last decades has unequivocally established how corruption and money laundering, while qualitatively referring to different phenomena, are in practice almost always unavoidably and reciprocally interlinked (Gordon, 2009; Kyriakos-Saad et al., 2012). As Christensen (2011) and Barone et al. (2019) have concluded, corruption generates demand for money laundering activities, while the possibility of laundering corruptly obtained money offers a supply-side stimulant for corrupt practices.

Authors such as Cooley and Sharman (2015) have shown conclusively that contemporary corruption relies on a web of cross-border links and financial transactions that serve to disguise illicit connections between corrupt political elites and the businesses that thrive by bribing these individuals. These relational and financial spaces consist of transnational networks of offshore companies, corporate vehicles, intermediaries, service providers and financial institutions that work together to move illicitly acquired resources and keep them away from the eyes of the public or law enforcement. Cooley and Sharman (2017) have highlighted the essential role of the providers of financial and legal services in managing these networks and lowering the transactional costs of transnational corruption.

Some offshore financial centres (OFCs) and secrecy jurisdictions have legislation that is “criminogenic”, i.e. that causes or is likely to cause criminal behaviour even if it is strictly legal (Tillman, 2009). Though there are many variations among jurisdictions, by designing their financial systems to offer financial services to non-resident firms and individuals (Sharman, 2010), OFCs provide a space for money from corrupt acts in other countries to be laundered (Christensen, 2011; Willebois et al., 2011). A common example of the criminogenic opportunities provided by OFCs is the misuse of corporate vehicles (legal entities such as offshore companies) for the illicit movement of money from private to public actors via a chain of transactions (Willebois et al., 2011). The information that emerged with the Panama and Paradise Papers has revealed the pervasiveness of the offshore financial networks described above (Obermaier & Obermayer, 2017).

Dominguez et al. (2018; 2020) identify the top jurisdictions in the global offshore network and describe the characteristics of the financial structure that connects them. The authors identify the British Virgin Islands, Hong Kong and Singapore as being among the most

significant players. They also argue that clustering dynamics connect so-called “transmitters” (such as the financial centres of Taiwan, Hong Kong, China and the US) with “receivers” of offshore operations (such as the British Virgin Islands, Samoa, the Cayman Islands, Panama and the Cook Islands).

The relevance of the OFCs derives from their capacity to simultaneously ensure ownership and non-ownership of resources and assets (Sharman, 2010). On the one hand, they guarantee the indirect and mediated control by the ultimate beneficiaries of corporate vehicles and other financial entities. On the other hand, they systematically disguise the relations between these offshore entities and their beneficial owners through the activities of service providers, surrogates, front men and cross-border chains of offshore vehicles (Willebois et al., 2011).

This concealing feature relates to what Kejriwal and Dang (2020) found when they studied the underlying properties of various offshore networks. They demonstrate that these structures constitute a distinct class of network, possessing particular structural, functional and operative characteristics for actors, geographical spaces and goals. In particular, the authors highlight that this type of network lacks the so-called small-world characteristic identified by Milgram (1967) and seen in many other types of social networks. In these transnational financial networks, most nodes of the networks *cannot* be reached from every other node by a small number of steps.

The mechanisms used to separate the different financial and relational clusters are another key characteristic of these networks. Examples are the use of offshore financial centres, the collaboration with service providers, and the use of surrogates and front men to conceal the beneficial owners of offshore companies.

The work of Kejriwal and Dang (2020) has furthermore highlighted that the lack of close interconnectedness implied in the absence of the small-world characteristic of the networks is also linked to their resilience. If key actors – even when they have a core position in the networks – are taken out, the relational structures tend to remain strong and stable. The authors note that this resilience is linked to the dynamic and evolving nature of the entities that are part of these transnational networks, such as operative conglomerates, financial intermediaries and offshore companies.

Both public and private actors can operate within transnational informal networks, occupying both the “upperworld” of formality and the “underworld” of informality (Galeotti, 2001). To do that, they switch between the legal facade of their business and political activities and the hidden financial infrastructure that helps to disguise their illicit transactions.

In the private sphere, the literature highlights the potential role of business actors as initiators of a corruption scheme (Gledhill, 2003; Shore, 2003). Arellano-Gault (2019) describes the practices and routines utilised by business actors to repeatedly conduct corrupt acts, such as the development of hidden communication and decision-making chains within company hierarchies, the creation of internal departments to manage corrupt behaviour, and the definition of guidelines for the illicit exchanges. Driven through a process of internal institutionalisation (Lambsdorff et al., 2004; Binmore, 2011; Vannucci, 2011), the private actors establish internal protocols, specific procedures and routine operative strategies to cope with these illicit requests. In this sense, private organisations create shadow internal structures to meet the demand for bribes and other forms of corruption from the public sphere.

Willebois et al. (2011) identify the critical individual and collective actors that operate in the corruption and money laundering nexus. Key individuals are beneficial owners, politically exposed persons (PEPs), surrogates and front men, and members of inner circles that surround politicians and businesspeople. The beneficial owner is the physical person who ultimately controls an asset and benefits from it, even if this control is exercised indirectly or covertly. The literature identifies PEPs, i.e. individuals who have been entrusted with a prominent public function, as generally presenting a higher risk of involvement in corruption, given the influential position they may have in the functioning of the state. PEPs are known to be common beneficial owners of assets that arise from corruption and money laundering schemes. This is why a basic anti-money laundering prescription is to monitor PEPs with particularly close attention (Chaikin & Sharman, 2009; Gordon, 2009; Greenberg & Gray, 2012; Choo, 2008).

PEPs that wish to take advantage of their privileged position through corruption do not act in isolation but in close proximity to their “inner circle”. Composed of political advisors, relatives, business people, friends and acquaintances (relevant connections that might stem, for example, from school or the army), the inner circle can help the PEPs to manage

their personal and financial interests (Burriss et al., 2009; Zarazaga, 2014). Members of the inner circle can facilitate the connection between PEPs and private actors, manage the laundering process and exert legal control over the assets hidden in offshore financial structures (Chayes, 2016). Specific roles are performed by so-called surrogates (individuals who have been declared by private contractual agreements as the party responsible for corporate vehicles) and front men (specifically selected individuals from the inner circle) in disguising the identity of the beneficial owners (Willebois et al., 2011).

Key collective entities are trust and company service providers and corporate vehicles, such as operative companies, shell/shelf companies, trusts and foundations (see Table 1).

Term	Description
Operative companies	Real business entities with ongoing activities, operative employees, and inflows/outflows of assets that often operate as a front company for money laundering schemes.
Offshore vehicles	Fictional business entities, including shell companies (non-operational legal entities without independent assets, ongoing business activities and employees) and shelf companies (non-operational legal entities that have been left dormant after their creation).
Trusts	A fiduciary relationship in which one party (the trustor) gives another party (the trustee) the right to hold title to property for the benefit of a third party (the beneficiary).
Foundation	A form of unowned economic actor, in which the contributors of assets cede the rights of ownership, control and beneficial interest to the foundation.

Table 1: Types of corporate vehicle, as identified by Willebois et al. (2011)

The connections between different operative companies and offshore entities create a cross-border network aimed at hiding the illicit activities of politicians, civil servants, business people and celebrities (Dominguez et al., 2020; Jancsics, 2018; Obermaier & Obermayer, 2017).

Shell and shelf companies are particularly essential to money laundering schemes (Jancsics, 2018). Shelf companies can appear more legitimate than newly created entities thanks to their intact credit and tax history. When a shelf company is sold, however, the inactive shareholders transfer their shares and roles to the new shareholders and directors

that are connected – directly or indirectly – to the new beneficial owner. Real operating companies can act as front businesses, allowing legal and illegal funds to be mixed. They may be based both offshore and in the jurisdiction in which the corrupt proceeds are generated (Willebois et al., 2011).

The last type of relevant actors are trust and company service providers, i.e. business operators that create and provide administrative services for corporate vehicles, such as law and accountancy firms, notaries and banks (Chayes, 2016; Sikka & Willmott, 2013; Willebois et al., 2011). These actors, who operate both in their own and foreign jurisdictions, are crucial in creating and managing corporate vehicles for licit and illicit purposes. They range from single individuals to firms with hundreds of employees who administer thousands of companies, such as the Panama-based law firm Mossack Fonseca (Bernstein, 2019; Obermaier & Obermayer, 2017). They are particularly relevant from the investigative perspective: given their role in setting up the offshore infrastructures, they are a potentially rich source of information to investigators during judicial activities.

In this context, Peacock (2018) and Cooley and Sharman (2017) note the important role of financial intermediaries, i.e. professionals and experts in the financial sector that operate worldwide to connect service seekers with the offshore financial centres. These actors mediate between individuals looking to conceal their assets in offshore entities and the service providers that can create them. Financial intermediaries and service providers commonly sell pre-existing solutions to their clients, recombining different offshore products into tailored solutions based on their scopes and goals. Sharman (2010) points out the ease with which it is possible to find financial intermediaries and service providers who illegally offer the opportunity to anonymously establish corporate vehicles and bank accounts without providing any certified identification documentation.

The research in this paper analyses these key concepts in light of the findings emerging from a detailed case study.

- The empirical analysis tests the central role of networks and financial infrastructures in promoting the activities of corruption and money laundering, and deconstructs the functions and placement of the key individual and collective actors.
- The research furthermore clarifies tasks and roles of beneficial owners, inner circle members, operative and offshore companies, and service providers.

- Finally, it collects evidence-based insights on the characteristics of the strategies used to disconnect the beneficial owners from the hidden financial infrastructures, and on how these disconnecting strategies are concretely managed.

This offers in-depth insights into how the resources flow through the transnational networks, and how the hidden financial infrastructures are governed.

Before turning to the analysis, it is important to understand the basic facts about the case chosen for this study.

3 The Odebrecht-Toledo case

The research analyses a case study related to the Lava Jato and Ecoteva investigations. The Lava Jato investigation involved thousands of individuals and companies in Brazil, Peru and several other countries in Latin America and Sub-Saharan Africa (Pacheco, 2017; Garay-Salamanca et al., 2018; Macias et al., 2018; Salcedo-Albarán and Garay-Salamanca, 2019). Its judicial consequences have spilled over to the political arena, involving dozens of politicians, political parties and civil servants.

In Peru, the judicial cases have involved four former Presidents – Alejandro Toledo, Alan Garcia, Pedro Pablo Kuczynski and Ollanta Humala – three of whom were investigated and arrested.¹ This case study focuses on the corrupt relations between the Brazil-based Odebrecht Group and the former Peruvian President Alejandro Toledo, who governed the country between 2001 and 2006 (Durand, 2018; Pacheco, 2017; Pari, 2016).

At the end of 2004, individuals close to President Toledo asked for a bribe of USD 35 million from Odebrecht's Peruvian director at that time, Jorge Barata, in exchange for the contracts for sections 2 and 3 of a large infrastructure project, namely the *Corredor Vial Interoceánica*

¹ The fourth, Alan Garcia, committed suicide as police were preparing to arrest him over matters relating to the Odebrecht scandal.

Sur Perú–Brasil (also known as *Carretera Interoceánica Sur*, or Southern Interoceanic Highway). The purpose of this project was to build a strategic highway between Brazil and Peru (Durand, 2018; Pari, 2016). The investigations revealed that, starting in 2007, Odebrecht and its subsidiaries transferred around USD 20 million to the bank accounts of shell and shelf companies linked to Toledo's inner circle. What happened to the remaining amount is still unclear.

Information about the bribery scheme first emerged thanks to Barata's judicial collaboration in 2016 with Brazilian law enforcement. Barata claimed that bribes had been paid to Peruvian political elites. This led investigators to connect Lava Jato with the Ecoteva money laundering investigation launched in Peru in 2014 against Toledo, in which the source of the funds had not been identified. Barata's claims showed that this money laundering scheme was connected to the corrupt agreement between Toledo and Odebrecht, and that the primary source of the money was in fact Odebrecht.

In 2017, Brazilian prosecutors shared with Peruvian officials the judicial testimony and declarations made by Marcelo Odebrecht, the company's former CEO, in which he described the mechanisms of the corrupt system that he and his subordinates had designed and continuously perfected over more than two decades. The Principality of Andorra, in response to a request from the Brazilian and Peruvian authorities, disclosed the possible payment of bribes to Alejandro Toledo. Josef Maiman, a close co-offender of Toledo, admitted having been the intermediary for the bribe.

The Peruvian judicial authorities called for the arrest of Toledo, who, since 2007, had moved to the US. He was then arrested and detained in custody, though is yet to stand trial in Peru. At the time of writing, Toledo remains in the US and is contesting the extradition order issued by the Peruvian authorities.

4 Empirical analysis

This research is based on the empirical analysis of data from publicly available sources. These include newspaper articles and reports by investigative journalists (e.g. Ojo Público,

IDL-Reporteros, Diario Correo, Convoca); books (e.g. Durand, 2018); parliamentary reports (e.g. Pari, 2016; Barriga et al., 2018); reports by non-governmental organisations (NGOs) and civil society organisations (CSOs) (e.g. Observatorio Anticorrupción, 2020); the two plea agreements made between the US Department of Justice and the companies Odebrecht S.A. and Braskem S.A.; publicly available judicial documents from Brazil, Peru and the US; Toledo’s extradition request from the Peruvian to the US authorities; and transcripts of testimonies. For more details about the methodology and data, see Annex I.

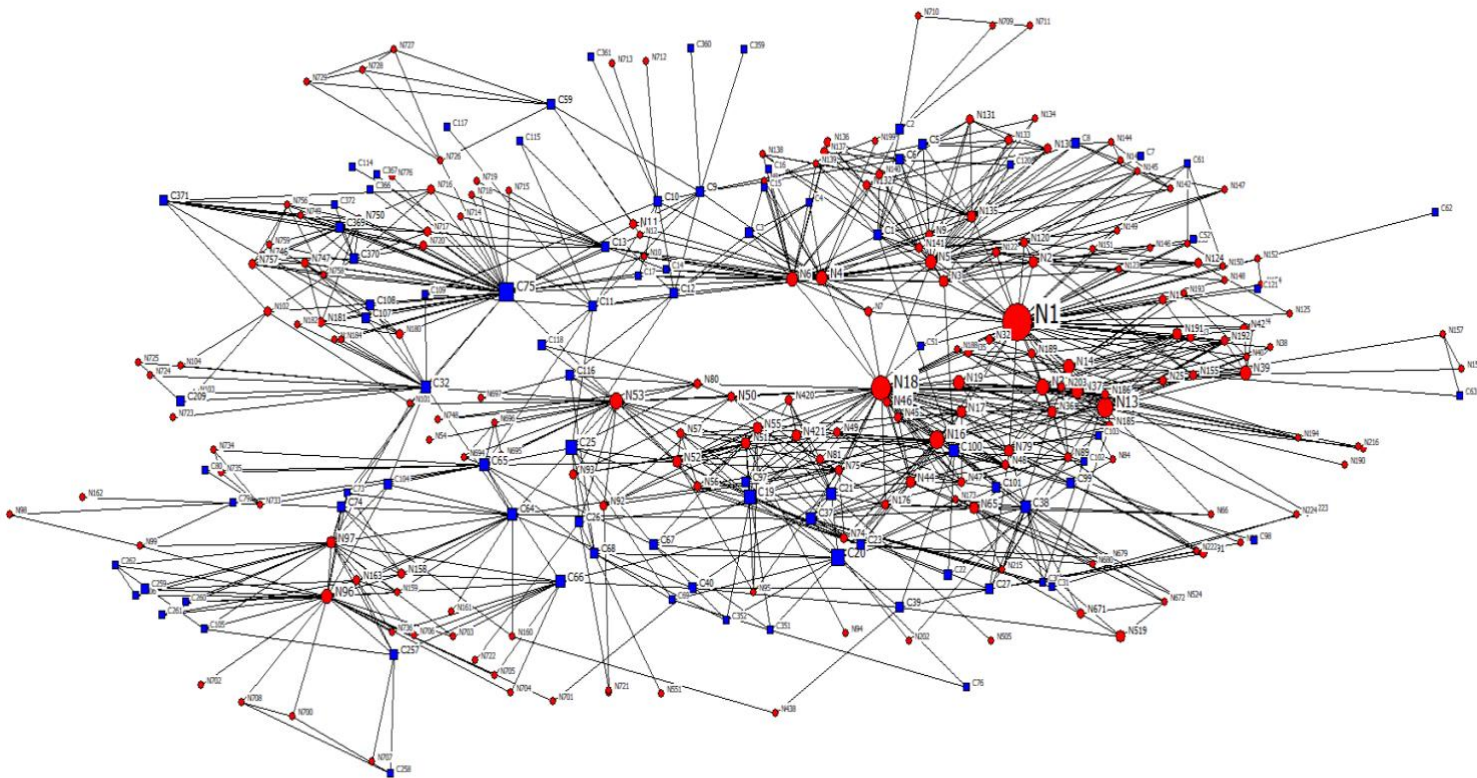


Figure 1: Transnational informal network, Toledo-Odebrecht connection

Social network analysis has allowed the detailed mapping of the network of actors who intervened in one way or the other to enable the corrupt deal between Toledo and Odebrecht to materialise. Figure 1 depicts the visualisation of this complex network. The analysis of

the empirical materials results in an unweighted, undirected, two-modes network based on individuals and collective entities (Hanneman and Riddle, 2005; Borgatti et al., 2013).²

The network consists of 281 nodes, of which 193 are individuals and 88 are collective entities. Individuals are represented as red points and collective entities as blue squares in Figure 1. These nodes were identified as being involved – directly or indirectly – in building and maintaining the Odebrecht-Toledo nexus. The nodes are referred to by specific labels: $N_i, N_{i+1}, \dots, N_{x-1}, N_x$ for individual nodes; and $C_i, C_{i+1}, \dots, C_{x-1}, C_x$ for collective entities. The use of labels makes it easier to visualise the network (as opposed to using names and surnames, which take up space) but they have no empirical relevance for the analysis. The nodes' size refers to their degree of centrality in the network. The degree of centrality measures the number of links that every node is able to attract within the network (Borgatti et al., 2013).

4.1 Structures and actors of the transnational informal network

The actors that form the network have specific ethnographic traits. The individuals are mainly middle-aged men from Brazil and Peru. Israel, Panama and Costa Rica are also significant as countries of origin of several of the individual nodes. These individuals have different professional backgrounds, including businesspeople and private-sector employees, high- and mid-level politicians and bureaucrats, as well as lawyers, accountants and notaries. A residual category consists of individuals who do not have a clearly defined profession but stand out because of their connection with Toledo.

Collective nodes are mainly corporate vehicles and service providers. With respect to corporate vehicles, the most common categories are operative companies and offshore entities such as shell and shelf companies. The category of service providers is mainly composed of law, accountancy and notary firms, banks and financial institutions. The Odebrecht conglomerate, its local branches and its operative companies, are based in

² “Unweighted” means registering only the presence (1) or absence (0) of a link. “Undirected” means not registering the direction of the link.

Brazil and Peru. Offshore entities and service providers are based in financial centres such as Panama, Costa Rica, Belize, Antigua and Barbuda, the British Virgin Islands and the UK.

The network represented in Figure 1 has an elliptical shape. This is due to the convergence of the social-financial clusters around the two poles of the corrupt agreement. The first pole revolves around Alejandro Toledo (node N1). It includes his wife Eliane Karp (N2) and mother-in-law Eva Fernenburg (N3), the Israeli businessman Josef Maiman (N4), Toledo's former head of presidential security Avraham Dan On (N5), Sabih Saylan (N6) and other Israeli businessmen (N7, N8, N9). These nodes represent Toledo's inner circle. They are a mix of relatives, close friends and business acquaintances that sustain his political activities, as well as his hidden and illicit financial interests.

The relation between Toledo and these nodes dates back in time. A central figure here is Josef Maiman, an Israeli businessman who, during the early 1970s, met Eliane Karp through some shared friends within the student network in Jerusalem. Eliane Karp shortly thereafter married Toledo in 1972. Maiman subsequently met other people who later came to play a key role in Toledo's network, notably Avraham Dan On and Sabih Saylan. Between the 1980s and 2000s, Maiman operated a multitude of business activities in Latin America, the Middle East, North Africa, the USA and Europe in different industrial fields. After the 2000s, and especially after Toledo became President in 2001, their connection grew stronger. The friendship between the respective families and their long-lasting personal ties cemented their trust. Maiman was also knowledgeable about the Peruvian political and economic context, given that he resided in the country while doing business, and could be a useful source of support for Toledo's political activities.

All these factors contributed to transforming Maiman into a close collaborator of Toledo, both before and during his presidency. Maiman introduced his former acquaintance from the army, Avraham Dan On, to Toledo, who appointed him as Head of Presidential Security. At the same time, Maiman accompanied Toledo during official travels and meetings in an informal role.

From newspaper articles and judicial documents, we know that in 2004, Toledo told Maiman about his need for a financial scheme to receive illicit money from a private actor. Maiman

activated several shell and shelf companies in Panama, Costa Rica and the UK for Toledo's benefit. These offshore entities included Ecoteva Consulting (node C1), Milan Ecotech Consulting (C5), Ecostate Consulting (C6), Confiado International (C9), Trailbridge Ltd. (C10), Warbury & Co. (C11) and Merhavs Overseas Limited (C12).

A dense web of Peruvian politicians and civil servants surrounded Toledo and his inner circle. These nodes include Pedro Pablo Kuczynski (N13), who was the Minister of Economy at the time and later on became the Peruvian President, a Vice Minister of Transport (N36) and a Prime Minister (N39). Other prominent individuals in the network were the Executive Director of Proinversión (N31), a public body responsible for promoting and attracting investment from the private sector, and members of Proinversión's technical committee (N14 and N15), who were responsible for the decision to contract the Southern Interoceanic Highway projects to Odebrecht. These are the individuals in the public administration who had key roles in tendering and procurement and that used their discretionary powers to illicitly award contracts to Odebrecht companies through laws and other official acts.

The Odebrecht constellation – the mix of directors, managers, employees and corporate vehicles that operate between Brazil, Peru and other Latin American countries – constitutes the second main cluster. It revolves around the Brazilian Marcelo Odebrecht (N16), the former Chairman and CEO of the Group. In terms of collective actors, of key interest are the parent company Odebrecht S.A. (C19), as well as other members of the conglomerate such as Construtora Norberto Odebrecht S.A. (C20), Construtora Norberto Odebrecht Suc. Peru (C21) and Braskem S.A. (C23).

Two high-level directors stand out as part of this cluster: Jorge Barata (N18, Director of the Odebrecht Group in Peru) and Hilberto da Silva (N55, Head of the so-called *Departamento Operações Estruturadas (DOE)* or "Structured Operations Department"). The DOE was the internal body within the Odebrecht Group directed to receive the requests or requirements from the individuals that had to be bribed in order for Odebrecht to obtain the contracts. All individuals in the DOE's organigram were involved in managing the illicit scheme.

Under the responsibility of the DOE's staff, a hidden financial infrastructure was put in place to channel financial flows from Odebrecht to the relevant public actors. This financial infrastructure was led by the Odebrecht financial intermediary Olivio Rodrigues Junior (N53) – an executive of the Group – his brother (N80) and other professionals (e.g. N54). Their role was activating, coordinating and managing a dense web of shell and shelf companies based in Panama, Belize, Uruguay, Antigua and Barbuda, and the British Virgin Islands. Klienfeld (C25), Balmer Holding Asset (C32), Constructora Internacional del Sur (C65), Smith & Nash Engineering (C67), and Golac Projects (C68) are some of the offshore companies that were set up for Odebrecht.

The transnational network is completed by two other clusters. The first is a sub-network based in Peru and built around a web of businesspeople and operative companies that maintained ongoing activities in the country and abroad. Its key operators were Gonzalo Monteverde Bussalleu (N96) and María Carmona Bernasconi (N97), supported by other co-offenders based in the country (N158, N159, N160, N163). They managed a web of business activities and operative companies, such as Constructora Área SAC (C64) and Construmaq SAC (C66). These companies could demonstrate real activities and projects, contracts, workers and financial flows. These Peruvian entities are a part of the broader web of financial entities aimed at moving the illicit money. This business structure represented a stage in the chain through which money was moved between different Odebrecht offshore entities along the money laundering chain.

The second cluster revolves around the service providers who operate in the offshore financial centres and who supply services and expertise in creating and managing offshore entities and hidden financial infrastructures. These actors – mainly law firms that employ hundreds of persons, such as Mossack Fonseca (C75) – operate as service providers and resident agents. The employees were often named as directors, shareholders, secretaries, and Presidents of the Boards of the different offshore entities that comprised the financial infrastructure linking the public and private clusters. They managed the activities of several different offshore companies, while at the same time connecting them into a dense web of interlocking offshore relations.

4.2 Inputs, financial flows and the direction of the exchange

The corrupt exchange and the mechanisms to launder dirty money take place along this transnational network, exploiting the hidden financial infrastructures connected to the private and public clusters. The corrupt cycle started at the end of 2004, when Maiman and other co-offenders of Toledo asked Jorge Barata (Director of Odebrecht in Peru) for a bribe of USD 35 million in exchange for the award of the contracts to carry out sections 2 and 3 of the Southern Interoceanic Highway strategic infrastructure project. Once Barata and Toledo's co-offenders agreed on the terms of the exchange, President Toledo leveraged his influence on the bureaucratic and political actors that managed the decision-making and administrative procedures governing the award of these public contracts.

Toledo's influence was key in triggering particular legal actions to enable the deal (Barriga et al., 2018; Pari, 2016).

- Law n. 28214 established that the project was being carried out for strategic reasons of public interest.
- The members of the Proinversión technical committee that controlled the award of contracts and tenders were appointed with Supreme Resolution n. 044-2004-EF. The President as well as one other member of that committee belonged to Toledo's circle.
- The participation of President Toledo in Session n. 87 of the Board of Directors of Proinversión served to accelerate the process and ensure the award of the project to Odebrecht and its partners.
- Supreme Resolution n. 156-2004-EF confirmed the delegation of the selection process to the Proinversión committee, and assured a right of concession on the management of the Southern Interoceanic Highway to the private-sector actors who would be entrusted with the contracts for its construction.
- Supreme Resolution n. 022-2005-EF exempted the project from undergoing a pre-investment stage, as would have been usually required by Law n. 27293.

In June 2005, Sections 2 and 3 of the Southern Interoceanic Highway project were awarded to two consortiums, both consisting of Construtora Norberto Odebrecht (CNO) and three Peruvian partners.

In parallel to all of this, Barata informed Marcelo Odebrecht (President of the Group) of the request from Toledo's inner circle for USD 35 million in exchange for the award of the contracts. Marcelo Odebrecht activated the DOE to facilitate this. As noted above, the DOE received inputs from managers and directors of the Odebrecht conglomerate operating in Brazil or other countries, and activated their financial infrastructure to carry out the payments.

The DOE's operations were carried out using two IT systems. MyWebDay was used to secretly account for payments and financial transactions. Drousys was used to hide the communication between the DOE's members, the financial intermediaries and the front men. In this case, the DOE activated the financial flows going from Odebrecht and associated companies to Toledo's inner circle in 2007, after his presidential term ended in 2006. This timing was linked to the informal norms of the corrupt scheme which imposed that the illicit payment be triggered only once the public funds linked to the project had reached the bank accounts of Odebrecht and its consortium.

The first stages of the scheme involved the flow of money between different entities that are related to the private sphere. Several financial transactions were sent from the bank accounts of CNO and other Odebrecht operative companies to shell and shelf companies based in the British Virgin Islands, Panama, Antigua, Uruguay and Belize. These offshore financial companies were formally managed by OFC's service providers but informally by Odebrecht employees.

The money then moved through the Peruvian sub-network that operated as a financial gateway. The offshore companies of Odebrecht sent funds to two operative companies in Peru, Constructora Area SAC and Construmaq SAC. At this point the money came under the control of the sub-cluster dominated by Gonzalo Monteverde Bussalleu and managed by his co-offenders (N97, N158, N159, N160, N163). Within this sub-cluster, the funds were transferred several times to and from a series of Peru-based and offshore companies they owned and managed.

Following this, the money moved to another ring of the Odebrecht-controlled offshore chain. The Peruvian subnetwork transferred the funds to the Panama-based shell company Balmer Holding Assets (C32). This offshore company was formally managed by Panamanian service providers but informally by Odebrecht employees.

The money then moved to the financial infrastructure of Toledo's inner circle. Together with other Odebrecht offshore companies, Balmer Holding Assets transferred funds to three companies connected to Toledo's close collaborator Josef Maiman (C10, C11, and C12). Thereafter, the funds were reciprocally transferred and exchanged between the three Maiman-controlled companies, further obfuscating their origin.

The three companies then transferred the money to the shell company Confiado International (C9), based in Panama and again linked to Maiman. Confiado transferred the money to two other offshore companies – Milan Ecotech (C5) and Ecostate Consulting (C6) – which were managed by members of Toledo's inner circle, such as Avraham Dan On and other Israeli co-offenders. Finally, Milan Ecotech and Ecostate Consulting transferred the resources to the Costa Rican offshore company Ecoteva Consulting (C1), headed by Toledo's mother-in-law.

The funds in the bank accounts held by his mother-in-law were thereafter directly accessible to Toledo and his wife, who used the monies to acquire a house – registered in the name of Toledo's daughter – plus two offices in Lima and two houses in Peruvian seaside cities. Part of the money also served to acquire real estate in the US, which Toledo moved into after the conclusion of his term. On paper, Toledo rented the house from the offshore vehicle that owned it, but in reality, he was the beneficial owner of this company. Additional safety measures were adopted to ensure the anonymity of the person “renting” the house, for instance, names and surnames did not appear on the mail box and door. Toledo even deposited several bank checks as rent “payment” for the house.

4.3 Management of the financial infrastructure

The empirical analysis offers unique insights into how the hidden financial infrastructures were built and managed. Both public and private actors had significant connections with service providers and financial intermediaries specialised in setting up corporate vehicles to launder money and enable illicit resource transfers. Some of these actors operated independently but more often were employees of law firms, financial consultancies and banks based in OFCs, such as Panama, Costa Rica, Belize, Antigua and Barbuda and the Bahamas.

The relationships between the supply and the demand side of the bribery transaction with these actors were based on polyadic (involving three or more elements) and durable links. One example is that two directors of the Banca Privada d'Andorra (N92 and N93) were contracted by Odebrecht's DOE to manage multiple illicit financial flows and corrupt agreements. Newspaper articles and judicial documents reveal that DOE staff frequently introduced these two financial experts to politicians and civil servants as consultants that could help with building a financial infrastructure to channel the proceeds of corruption.

The strategies used by the individuals associated with Odebrecht to separate its licit and illicit activities were elaborate. Firstly, the Group, headed by Marcelo Odebrecht, designed an internal organigram that relied on departmentalisation and specialisation. Under the guise of routine procedures and protocols, not dissimilar to those governing the activities of other departments, the DOE was able to undertake illicit tasks.

These strategies benefited from economies of scale and professionalism. On one hand, the large number of corrupt agreements made the implementation of standardised procedures and protocols easier, as did the repeated use of structures such as offshore vehicles and OFCs. On the other hand, the co-optation of the service providers into the network supplied the level of professionalism necessary to manage these offshore financial infrastructures effectively. Along these lines, the service providers facilitated the presence of surrogates that operated as shareholders, directors, presidents, secretaries and resident agents of the offshore vehicles (Willebois et al., 2011). This all aided in obscuring the role of Odebrecht's employees in orchestrating the hidden financial infrastructure.

The story on the public side is illustrative too. The analysis shows that Toledo's inner circle, comprised of relatives, friends and acquaintances, managed the financial infrastructure. Maiman's expertise and social capital/connections were decisive in building this infrastructure for facilitating the money laundering scheme. In particular, the management of shell company *Confiado* – opened by Maiman in Panama in 2003 – offers interesting insights into how these actors managed an offshore vehicle without directly controlling it.

Maiman operated the shell company *Confiado* through a 30-year-old tie with a Swiss law firm. This law firm operated as a financial intermediary (Peacock, 2018) and connected clients to the service providers based in OFCs. Formally, the offshore company *Confiado* was constituted in Panama by a service provider that operated as a resident agent of the

entity. The service provider appointed its own employees as shareholders of the company and three other service providers as its directors. The shareholders and directors had administrative but not decisional power, the latter remaining in the hands of the beneficial owner of the offshore company, i.e. Maiman. He controlled the company remotely; the shareholders, directors and resident agents did not even know him. Maiman, who resided between Israel and Peru, issued directions through his sister. She resided in Israel and managed the financial administration of Maiman's business group. She communicated Maiman's directions to the law firm's employees in Switzerland, who in turn communicated them to the resident agent in Panama, whose employees and service providers executed the orders.

The strategies used to establish the Costa Rican shelf company Milan Ecotech and the shell companies Ecostate and Ecoteva were slightly different. First of all, the creation of these offshore vehicles was handled directly by Alejandro Toledo with the support of Maiman and Avraham Dan On, his Head of Presidential Security. Together with the latter, Toledo travelled to Costa Rica to meet with a group of Costa Rican notaries. For the company Ecoteva, Toledo decided that his mother-in-law would formally preside over it, while in reality Toledo himself would retain control over its finances. Toledo's control over the shelf company was facilitated through the intermediation of an Israeli lawyer who was also part of the Toledo inner circle and who was authorised to control the bank accounts of Ecoteva and even those of Toledo's mother-in-law.

A key characteristic of these three Costa Rican offshore vehicles is that they were managed by a mix of service providers (surrogates) and inner-circle members (front men). While directors and resident agents were Costa Rican citizens appointed by the Costa Rican notaries, the roles of president and secretary were reserved for members of Toledo's inner circle. Despite their role, the Costa Rican directors never had contact with any of these individuals, underscoring the disconnect between the service providers and those of the inner circle who operated as front men within the financial infrastructure (Willebois et al., 2011).

4.4 Functional roles within the transnational informal network

The research identifies the main functional roles that were necessary to achieve the illicit goals as follows:

Organisers and beneficiaries of the scheme of corruption and money laundering. These are the main actors profiting from the illicit transactions both in the demand (receiving the bribe) as well as in the supply (paying the bribe to win the contract) sides of the network. In this case study, these refer to Alejandro Toledo and the Odebrecht Group's high-level managers and directors respectively. The private side benefited from the illicit acquisition of multi-million-dollar public contracts; the public side benefited from the bribe. These private and public poles represented the primary sources of the operative inputs upon which the scheme of corruption and money laundering was built.

The two clusters maintained fruitful relations in the visible "upperworld" through, for instance jointly participating in official meetings and in philanthropic, cultural and social events. These relations were instrumentally showcased to citizens and politicians, the international community and civil society as an opportunity for public-private partnerships that can promote modernisation, economic acceleration and development. These visible relations were paralleled by those connecting the two clusters in the underworld through concealed financial schemes in the transnational informal network.

Implementers. These are members of the inner circles that surround the organisers and beneficiaries. The schemes that sought to hide the ties between Toledo and Odebrecht were orchestrated and implemented by the members of the respective inner circles of the two corrupt poles. These implementers were high- and mid-level managers and employees of the Odebrecht Group and Odebrecht's financial operators and members of Toledo's inner circle, comprised of relatives, friends and acquaintances.

Implementers engaged in various tasks, such as operationalising the inputs coming from the corrupt cores, negotiating the corrupt agreement and designing the modalities to transfer the financial flows successfully. Importantly, they orchestrated – together with the service providers – the layering of operative companies, offshore vehicles and bank accounts that constituted the basic concealment strategy of the money laundering scheme. Simultaneously, these actors organised the smooth integration of the private and public financial infrastructures.

The findings suggest that the direct participation of the implementers in the management of the financial infrastructure is more common in public rather than private spheres of transnational informal corruption networks. In this case study, Odebrecht's managers and

employees never held a formal role in managing offshore vehicles. However, Toledo's inner circle directly managed the financial infrastructure. One way to explain this could be that higher levels of professionalism and economies of scale allowed the Odebrecht Group to more successfully exploit routine practices and outsourcing mechanisms. After all, the financial infrastructure of the Odebrecht Group was used to facilitate hundreds of corrupt agreements, as opposed to the financial infrastructure surrounding Toledo, which was set up to facilitate the execution of a few corrupt agreements.³ Consequently, the financial infrastructure of the public side remained more amateur than professional.

Operators. These are the service providers and financial intermediaries that operationalise the mechanisms to separate the corrupt cores from the illicit financial flows. Their activities built and managed the infrastructures that facilitated moving illicit funds across the globe. After receiving inputs from the implementers of the corrupt scheme, the operators created and layered operative companies, offshore vehicles and bank accounts, creating an exceedingly complex financial structure.

Service providers and financial intermediaries offered a complete package of administrative services, ranging from the supply of expertise, skills and human capital to the assembly of different offshore instruments that matched the needs of their customers. Given their additional role as shareholders, directors, presidents, secretaries and resident agents, these actors were able to register and administer the offshore vehicles. Among other things, they handled the accounting, tax payments and contract signatures. In this framework, service providers and financial intermediaries acted as highly skilled service suppliers that legally operated within their respective jurisdictions.

Offshore vehicles, such as shell and shelf companies, were the basis of the hidden financial infrastructure and were located at critical junctures. Some of these entities organised bribes and financial flows for different corrupt agreements. Connected by service providers sitting on a multitude of boards, the offshore vehicles resided within a dense social-financial complex that made it much harder to trace the origin of the funds.

³ This research is limited to the corrupt agreement between Odebrecht Group, Toledo and his inner circle. However, the analysis of the empirical materials confirms that Toledo received smaller bribes from other Brazilian conglomerates, such as Camargo Correa.

The analysis shows the relevance of this social-financial complex, i.e. the dense mix of individuals (both surrogates and front men), operative companies and offshore vehicles that characterises the transnational network.

Sub-networks. The financial infrastructure is functionally completed by sub-networks that served as additional transit points for the financial flows. Their specific role was to further conceal and launder the flow of monies from the private-sector cluster to the public-sector core of the network. They added another level of complexity to the money laundering scheme. These sub-networks were formally disconnected from the cores of the corrupt exchange. The small clusters of operative companies were able to mix the corrupt proceeds with those of their formal business activities, ensuring that the financial flows were even more successfully concealed and difficult to trace.

5 Discussion and conclusion

The findings presented in this paper contribute to the emerging evidence base on money laundering and corruption. The research reveals that a cross-border, highly technological and complex illicit exchange involving transnational informal networks and hidden financial infrastructures is built to hide beneficiaries of the corrupt agreement, i.e. the business and political pillars.

The interaction between the private and public financial infrastructures is smooth and efficient. It is orchestrated by an intertwined web of inner-circle members and service providers. It is facilitated through the use of operative companies, offshore vehicles and bank accounts managed by these nodes. The connections between individuals and companies create what the research refers to as a *social-financial complex*, meaning the relational and operative substance of the financial infrastructure. This social-financial complex allows the corrupt actors to achieve their illicit goals through money laundering and serves to create a disconnect between the ultimate beneficiaries of the corrupt agreement.

The deconstruction of actors' and clusters' functions within the financial infrastructure highlights the strategies used to disconnect the upper- and underworld of the public and private beneficiaries. Notably:

- The inner circles of the private and public spheres are used as the first and last defensive line to conceal the involvement of their masters in the corrupt exchange. This is possible due to the level of proximity, trust and reciprocity built between business leaders and particular subordinates or between a PEP and their circle of relatives, friends and acquaintances.
- The second defensive line is the pool of knowledge, skills and social capital that belongs to service providers and financial intermediaries. Acting as aggregators of services, tasks and know-how, they play an essential role in designing the financial infrastructure that enables the corrupt exchange (Sharman, 2010; Cooley and Sharman, 2015, 2017).

It is interesting to note that the focal actors of the corrupt agreement outsource the design and management of the entire financial infrastructure to these actors, despite the risk this could bring due to the increase in the number of actors involved in the corrupt scheme (Baker & Faulkner, 1993). This is possible because the service providers and financial intermediaries to which these activities are outsourced guarantee, as the basis for every service they provide, the highest possible level of discretion, anonymity, identity protection and security (Sharman, 2010). In this framework, the offshore vehicles are located at critical junctures and manage multiple financial flows and corrupt agreements. They constitute, together with their operators, a dense web of social-financial relations stratified in multi-layered chains for sustaining the flows.

This multi-layered ecosystem – the social-financial complex and the financial infrastructure that proliferates along the transnational informal network – is governed by a well-functioning informal governance system. The balanced mix of centralisation and decentralisation is what allows this complex scheme to operate. What this means is that the informal governance system is centrally designed and controlled by the core actors. These define inputs, rules and final outputs, and coordinate the activation and involvement of the different actors and clusters. Afterwards, the informal governance system is decentralised to the managers and employees who preside over internal divisions or national branches of the

multinational conglomerate (on the side of the private actors) and to the PEP's inner circles (on the side of the public actors).

These implementers are responsible for negotiating the corrupt agreement, directing the financial flows and managing the hidden financial infrastructures. To this end, they rely on service providers and financial intermediaries to operationalise the instructions and design the financial infrastructure. This mix between centralisation and decentralisation results in an efficient and effective – and comparatively safe – way to govern what is typically a large, cross-border and complex multi-layered social-financial structure. It also provides the flexibility and adaptability that these structural and functional elements require to work efficiently, while retaining the direction and leadership that the exchange needs.

Ultimately, the legitimacy of the corrupt scheme resides in the core actors of the illicit agreement – the PEPs and business leaders who are the ultimate beneficiaries. At the same time, if deprived of the implementing and operative capacities at the decentralised level, the corrupt scheme would be unable to fulfil its illicit potential. Both aspects are essential.

As participants in a collective and cooperative network, the PEPs and business leaders interact in a reciprocal game based on strategic adaptation and bargaining. Their reciprocal power determinates the conditions and contents of the corrupt agreement (Binmore, 2010, 2011; Weirich, 2011; Verma et al., 2018). The complex and essential activities and operations of the network go against the traditional idea of a bribe as a form of dyadic exchange between two individuals. Instead, we see a cooperative and collective dynamic that serves to implement the corrupt agreement and operationalise all the structures of protection and disconnection – both financial and social – that are needed to conceal the illicit agreement between the cores.

To conclude, the empirical findings describe a form of corruption that exploits a multitude of spaces, actors, entities, expertise and money laundering strategies to ensure an increase in the level of security, protection and profits for the ultimate beneficiaries. The analysis has focused on one specific case, but the complexity it reveals is by no means unique in grand corruption cases around the world, past and present.

The systematic use of such money laundering strategies and financial infrastructures to achieve corrupt goals has modified the intrinsic structural and functional traits of contemporary corruption. This form of corruption is a by-product of the political, economic

and social history that cover the decades from the beginning of the 1990s to the present day, which can be defined as the age of globalisation and networks (Barabási, 2002; Castells, 2009; Khanna, 2016). In this context, efforts to tackle transnational corruption and money laundering urgently require more research to analyse the networks behind grand corruption schemes and the informal governance structures that hold them together.

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Annex A: Methods & techniques

The research analyses a specific case study, namely the Odebrecht-Toledo corrupt connection. This case has emerged thanks to the investigations connected to the Ecoteva and Lava Jato affairs (Durand, 2018; Pacheco, 2017; Pari, 2016). The case study regards the corrupt relations between the Odebrecht Group and the former Peruvian President Alejandro Toledo, who governed the country between 2001 and 2006.

The empirical materials have been studied through social network analysis (SNA) and network ethnography (Campana & Varese, 2012). In brief:

- Thanks to SNA, the research deconstructs the transnational informal network involved in the corruption and money laundering scheme, analysing the links between individuals and companies (Borgatti et al. 2013; Hanneman and Riddle 2005; Garay-Salamanca and Salcedo-Albarán 2012).
- In turn, network ethnography has made in-depth diving into the mechanisms, strategies and norms that sustain the operations of the transnational network possible (Kenney & Coulthart, 2015). Specifically, network ethnography has focused on the roles of the public and private actors, as well as on the strategies applied to create, manage and exploit the financial infrastructures (Coviello, 2005; Heath et al. 2009; Edwards, 2010; Berthod et al. 2017; Jones et al. 2018).

More detail on the particular value of combining SNA and network ethnography is given below.

Why this case study?

The Odebrecht-Toledo connection represents a meaningful case for this research. First, it is an illicit episode with enormous judicial impact and media attention worldwide, as an example of grand corruption between a member of the political elite and a business giant represented by a multinational conglomerate. The opportunity to analyse structures, actors, functions and strategies is unique to highlight essential insights into the money laundering-corruption nexus. Finally, the judicial processes are concluded with definitive guilty sentences for hundreds of actors involved in the investigations. Together with the clarity on roles, responsibilities and events, the size of this judicial case offers a large amount of easily available empirical materials. The amount of empirical material available for the analysis permits the use of mechanisms of triangulation, deepening and clarification that increase the quality of the research.

Sources

The research is based on documentary analysis of newspaper articles and investigative research by Peruvian publications (e.g., Ojo Publico, IDL reporter, Diario Correo, Convoca), books (e.g., Durand, 2018), parliamentary reports (e.g., Pari, 2016; Barriga et al., 2018), reports by NGOs and CSOs (e.g., Observatorio Anticorrupción, 2020), publicly available judicial documents from Brazil, Peru and US, transcripts of testimonies, the extradition request from the Peruvian to the US authorities, and the two plea agreements between the US Department of Justice and the Odebrecht cluster.

These empirical documents have been analysed through two complementary analytical lenses.

Social network analysis

First, social network analysis has made it possible to identify the actors that compose the network and the links that connect them. A two-modes network has been analysed (Hanneman and Riddle, 2005; Borgatti et al., 2013), i.e. based on both individuals and collective entities as the unit of analysis. The research maps three types of links:

- Individual – individual
- Individual – collective actors
- collective actors – collective actors

Individual – individual links are extracted from information on the status of co-offenders in specific criminal conduits; on family, friendship and kinship relations; on money and financial flows and transactions; on the co-participation in meetings and other social events; on shared membership of political parties or business/cultural associations; and professional experiences.

Links between individuals and collective actors are extracted from information on the employment relationship between companies and employees; on the definition of contracts for consultancy or the supply of services; on the financial flows and transactions moving from companies and legal entities to physical persons and vice versa; on party and association memberships; on the structures of management and control of legal entities (owners, boards of directors, shareholders, presidents and secretaries).

The collective actors – collective actors relations are extracted from information on the contracts for services, consultancy, collaboration or technical support that are drawn up between the different legal entities; on the financial flows and transactions that move

between these collective actors; on the managerial and ownership structure, where the role of directors or shareholders is held by legal entities such as offshore companies or trusts; and on shared participation in a consortium and temporary associations of enterprises, business investments or joint ventures.

Network ethnography

Network ethnography has made it possible to examine the substance contained in these empirical sources. This part of the analysis has enabled the extraction of information on the roles, norms of cooperation and strategies that clarify how the transnational informal network, and its complex web of hidden financial infrastructures, operate to sustain the illicit nexus.

After a preliminary reading of these documents, the most interesting textual components were selected as empirical support for the analysis. The raw insights emerging from these textual components were then distilled into the step-by-step description of the various roles, functions and strategies in the transnational network.