Seismic Risks: a Criminological Analysis of European Investment Bank Support for the Castor Project

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Abstract

The Castor project was a proposed underground gas storage facility off Spain's Mediterranean coast financed through a public–private partnership (PPP) between the Spanish state and a consortium led by the Spanish conglomerate Grupo ACS. During the project's development, cost overruns led to it being refinanced through a bond issuance organized by the European Investment Bank (EIB)—the finance arm of the European Union (EU). On reaching the injection stage, gas escaped violently causing hundreds of small-scale earthquakes resulting in the project's closure and, as per the terms of the concession, the generation of a €1.3 billion debt for Spanish gas consumers. Using criminological concepts and theory, this article will first explore how the seismic risks that the project posed were excluded from the EIB appraisal process before identifying the causes of the disaster as a product of the “financialization” of infrastructure and investor protection frameworks needed to sustain it.

Introduction

The Castor project was a failed attempt to convert an abandoned undersea oil reservoir 22 km off the Spanish Mediterranean coast into a gas storage facility capable of providing additional reserve capacity to act as a buffer for short-term variations in Spain's gas supply. During the project's development, it was beset by cost overruns and delays, leading to a default on the bank loans by the promoter to finance its construction. In order to rescue the project, the European Union (EU), through its finance arm the European Investment Bank (EIB), selected the project to be part of the pilot phase for the Project Bonds Initiative (PBI)—a new EU bond-financing instrument designed to attract investment to strategic infrastructure projects across Europe in difficult postcrisis economic conditions.

On reaching the injection stage in 2013, gas violently escaped the reservoir, causing hundreds of small-scale earthquakes resulting in the project's closure. As per the terms of the concession from the Spanish state to the project promoter, the facility was returned to the state triggering a €1.3 billion compensation for the bondholders (including the EIB) to

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be financed by increases to Spanish gas consumers' bills. The bailout of the project caused a scandal across Spain with the public incensed by the Spanish authorities and EU institutions' mishandling of the project, which saw investors receive financial rewards despite its failure.

This article has three objectives. First, in a continuation of the contributions offered by Caneppele and colleagues (2013), Schotter and Rhineberger-Dunn (2013), and Sergi and South (2016), it will identify infrastructure projects as a site worthy of increased criminological attention. Second, it will introduce the EIB, an overlooked international financial institution (IFI), and assess how it mishandled the seismic risk the project posed during its appraisal and due diligence. Finally, it will address the critique proposed by Lasslett (2010), Tombs (2012) and Whyte (2014) on the tendency within state-corporate crime research to engage in empirical retellings of events at the cost of locating events within the social relationships that produce them. This article's contribution to the debate will be to explore the Castor project disaster as the inevitable outcome produced by the ways in which infrastructure is becoming financialized.

Introducing the European Investment Bank

The EIB is the finance arm of the EU (sometimes referred to as a "policy-driven bank") that identifies and invests in infrastructure projects (e.g., communication, energy, transportation) that contribute to achieving EU policy objectives. Established as part of the Treaty of Rome in 1957 and the emergence of the European Economic Community, the EIB's original mission was to facilitate the mobilization of capital toward financing infrastructure with the aim of increasing production, modernizing the economy, and bringing investment to underdeveloped regions (Bussière et al. 2008). The task bestowed on the EIB in the 1950s remains more or less unchanged now despite the EU's expansion and changes to the economy: it issues debt on capital markets to generate financial resources (under a distinct legal personality and under the guarantee of EU member states) and then lends to project promoters (both public and private entities) at low interest rates providing a stable source of finance for infrastructure across the continent and beyond.

Ownership of the EIB is divided between the twenty-eight EU member states whose shareholding percentage is broadly in line with the size of its economy. France, Germany, Italy and the United Kingdom (UK) each have 16%, and in combination with Spain as the fifth largest, comprise 74% of the bank's total shareholding with the rest divided between the smaller EU member states. In contrast to the other IFIs (such as the European Bank for Reconstruction and Development (EBRD), International Monetary Fund (IMF) and the World Bank Group), EIB lending activity is undertaken predominantly in the territories of its shareholders, meaning that the larger EU states are also the biggest recipients of EIB project loans. Some 90% of its activities are located within the EU with the remaining 10% undertaken outside in support of the European Commission's external lending mandate. In the 1990s, the EIB took over the World Bank Group to become the world's largest supranational public lending institution in terms of lending volumes (Clifton et al. 2017: 1) and, in the last three financial years (2016, 2017 and 2018), it lent €76, €69 and €55 billion, respectively, far exceeding the lending volumes of the World Bank Group and the IMF for the same period.

As per the EIB's current objectives, its priorities are to finance infrastructure, increase access to finance for small- and medium-sized enterprises (SMEs), support innovation and

skills, and encourage environmental and climate friendly projects—all within the context of its statutory commitment to promote ever-closer and efficient links between the internal market and territories of the EU (European Investment Bank 2013). Not all EIB-financed projects contribute to Europe's development as intended and several high-profile projects have attracted censure from the European Parliament and its Ombudsman, as well as from nongovernmental organizations (NGOs) and the media. The Castor undersea gas storage facility in Spain, discussed in this article, created a €1.3 billion debt for Spanish citizens, and the MOdulo Sperimentale Elettromeccanico (MOSE) [*Experimental Electromagnetic Module*] and Passante di Mestre projects in the Veneto region of Italy stimulated corruption networks between public officials and organized crime groups (Tarantino and Gerebizza 2012), while the EIB has been criticized by CEE Bankwatch Network for failing to monitor how its loans to Volkswagen became entangled in the “Dieselgate” emissions scandal.

Despite these controversial EIB-financed projects and the wider implications of EIB lending activities, academic attention has been sparse. Robinson (2009) has characterized the EIB as a “neglected institution” insofar as its size and influence within the EU are not commensurate with research on its activities, save for the occasional debate proposed on its public policy responsibilities in the EU (e.g., Honohan 1995). Research of a more critical nature on the EIB is equally limited. Gutner (2002) has assessed EIB environmental performance in Central and Eastern Europe (CEE), comparing it unfavorably with that of the EBRD and the World Bank, while Hachez and Wouters (2012) claim that the EIB's commitment to human rights, as well as to environmental and social issues in its operations, is generally weak. Much of the existing literature on the EIB is underpinned by an analysis of its institutional status or focused on a specific policy initiative. In contrast, this article will instead examine an individual EIB-supported project and explore how the EIB's mishandling of the technical risks in its appraisal of the project contributed to its failing.

Sequencing the Events Leading up to the Castor Project Disaster

The Castor project was conceived as a strategic infrastructure project by successive Spanish governments (both the center-right PP (*Partido Popular*) and center-left PSOE (*Partido Socialista Obrero Español*)) as a means to provide additional gas reserve capacity by converting the then-abandoned Amposta offshore oil reservoir into a gas storage facility. Gas would be injected into the reservoir which, via a pipeline and processing plant, would then be connected to Spain's national energy grid. When operational, the Castor undersea gas storage facility would be capable of holding the equivalent of 30% of Spain's daily gas use for fifty days (Ruiz-Barajas et al. 2017: 2), thereby acting as a buffer to any short-term fluctuations to Spain's gas supply which is dependent on North African imports.

As a PPP (public–private partnership) project, the Spanish government outsourced the construction costs to a private sector constructor in return for a fixed income flow during the lifetime of the project. The company in charge, ESCAL UGS, was majority-owned by Spanish conglomerate Grupo ACS (66.7%), while Canadian company, Dundee Energy, controlled 24% and the Spanish company, Enagás, 9.8% (Ernst and Young 2015: 87). In order to attract investors to the capital-intensive project, successive governments developed a comprehensive investor guarantee framework that would protect investments even in the event of the concession being returned to the state. Article 5.3 of the Spanish Royal Decree

ITC/3995/2006 established the first guarantee, while Article 14 of Decree 855/2008C extended it to include even cases of fraud and negligence on the part of the concessionaire.

During the construction stage, the project ran into financial trouble with costs increasing threefold between 2007 and 2010 from €400 million to nearly €1.3 billion. At this point, the original bank loans taken out by the promoter to finance the construction phase were reaching maturity, leading the company toward a default. The situation was worsened by the overall financial state of Grupo ACS in the now postfinancial crisis landscape. Previously, it had embarked on a growth strategy based on company acquisitions and, as a result, it had a debt pile amounting to twice the market value of the entire company. As such, it was dangerously leveraged. Because of its size, the potential collapse of Grupo ACS posed a systemic risk to the fragile Spanish economy and needed to be rescued.

In order to save the Castor project from default, the Spanish government moved to secure EU support to refinance it. To do so, Spain submitted the Castor project to the European Commission as a potential Project of Common Interest (PCI)—an EU-wide list of infrastructure projects that would benefit from €5.12 billion in EU funding via the Connecting Europe Facility (CEF). EU involvement in refinancing the Castor project was initially to be made through a €600 million EIB loan, and between autumn 2009 and spring 2010, the EIB undertook a full economic, financial and technical assessment of the project, including site visits and meetings with experts (European Investment Bank 2018: 16). In September 2011, however, the EIB proposed to the Spanish authorities that the Castor project be the pilot project for a new European Commission/EIB infrastructure funding instrument—the Project Bonds Initiative (PBI), which would connect institutional investors (e.g., insurance companies, pension funds) to infrastructure projects across the EU. In July 2013, the EIB's Management Committee approved the final terms and conditions of the EIB's financing for the project allowing it to proceed to the gas injection phase.

Three days after the injection phase began in September 2013, gas violently escaped from the undersea reservoir causing hundreds of earthquakes with some reaching the mainland (Ruiz-Barajas et al. 2017). Further work on the Castor project was halted and, a year later, the Spanish government approved a Royal Decree suspending the project indefinitely. As per the terms of the concession, the promoter returned the Castor project to the Spanish state which then issued a further Royal Decree accepting its relinquishment (European Investment Bank 2018: 6). Within ninety days, the Spanish state repaid €1.35 billion to the project promoter, out of which all the bondholders, including the EIB, were repaid. In order to finance the repayment, €1.35 billion was added to all Spanish gas consumers' bills to be repaid over the next thirty years, representing the latest in a series of infrastructure projects to be bailed out by the Spanish public in the midst of a grim recession and 24% unemployment rate.

State-Corporate Crime and Crimes of Globalization: Moving Beyond Empirical Retellings

Large infrastructure projects, such as the Castor project, are complex initiatives involving dozens of state agencies, possibly hundreds of subcontracting companies and thousands of individual workers at all stages—from procurement and construction to ex-post monitoring. Through their interactions with the natural and built environment, large projects pose the possibility of adverse environmental, financial and social impacts on the communities where they are housed/sited (Caneppele et al. 2013; Schotter and Rhineberger-Dunn 2013;

Sergi and South 2016). The extent and severity of these impacts have been observed by critical criminologists using a concept of “harm” that encompasses a range of acts and omissions that cause substantial and demonstrable suffering to individuals and groups, but which are routinely ignored by the criminal justice system or viewed as mere “administrative” or “regulatory” offenses. Criminologists use this contradiction to underpin their critique of the ontological reality of “crime” insofar as such behaviors, while being routine, systematic and occurring on a greater scale than “traditional” forms of crime, are nevertheless dismissed as “lesser crimes” (Boukli and Kotzé 2018).

In the case of the Castor project, this same contradiction is apparent: the mishandling of the seismic risk led to the project’s closure and the generation of €1.35 billion debt to be paid by Spanish gas users, while conversely, investors’ financial commitments were protected by the Spanish state. As a continuation of the approach of Hildyard (2016) and Boukli and Kotzé (2018), this article views the debt created by the Castor project as a form of economic/financial harm consistent with Dorling and colleagues’ (2008: 14) observation of the financial harms caused by practices such as fraud, pension mis-selling and regressive taxation.

By observing the Castor project disaster through a criminological lens and as the result of interactions between the Spanish state, a multi-national construction conglomerate and EU institutions, this article brings together several bodies of connected criminological research. First, the customary nod should be made toward Sutherland’s (1949) call to reorientate criminology as a discipline away from the powerless to the upper echelons of society. It was not until the paradigmatic revolution of 1970s, however, instigated, in large part, by Pearce’s groundbreaking *Crimes of the powerful* (1976), that a body of criminological literature emerged dedicated to the study of deviance committed by corporations, politicians and other elites (e.g., Clinard and Quinney 1973; Ermann and Lundman 1978; Schrager and Short 1978). Pearce undoubtedly laid the intellectual foundation for much of critical criminology’s current engagement with elite deviance, later consolidated and expanded by Barak (2015), Bittle and colleagues (2018) and others to include several additional fronts, such as crimes of globalization, environmental crime and green criminology, organizational crime, organized crime, state crime and state-corporate crime. As a result of this article’s specific focus on the connections between an IFI’s financing of the project and its outcome, this article intersects with two specific research endeavors that fall under the umbrella of “crimes of the powerful.”

First, state-corporate crime research focuses on “illegal or socially injurious actions that occur when one or more institutions of political governance pursue a goal in direct cooperation with one or more institutions of economic production and distribution” (Kramer and Michalowski 2006: 20). Such research is useful to underpin the analysis of the Castor project, which can be viewed, in part, as the result of cooperation between the Spanish state and the conglomerate in charge of its construction. This body of research began in the early 1990s and has included case studies on the Space Shuttle Challenger disaster (Kramer 1992), the criminogenic features of the United States’ (US) nuclear weapons industry (Kauzlarich and Kramer 1998), and the 2007 collapse of the I-35 W bridge over the Mississippi River (Schotter and Rhineberger-Dunn 2013). State-corporate crime research has expanded beyond the US to include case studies on the UK government’s relationship with private military companies (Whyte 2003), the mining and extractive industries in Colombia (Zaitch and Gomez 2015), and tax rulings made by EU member states that facilitate aggressive tax planning (Evertsson 2017).

Second, research on the crimes of globalization shares some of the same concerns as that on state-corporate crime, but it engages specifically with IFIs, such as the IMF and

World Bank Group. It is relevant to this article given the project's support by the EIB as an equivalent IFI. Beginning with Friedrichs and Friedrichs' (2002) study of a dam financed by the World Bank Group in Thailand, the crimes of globalization literature aims to better understand the lending activities of IFIs in the Global South, while often interpreting their conduct and operations through a neo-colonialist perspective that critically dismantles many of the development claims made by such organizations (e.g., Friedrichs 2018; Rothe and Friedrichs 2015)—drawing attention, instead, to the ways they can contribute to worsening economic conditions (Ezeonu 2008), stimulate corruption (Rothe 2010) and fuel military conflict leading to human rights abuses (Rothe et al. 2008; Stanley 2008).

Common to both bodies of the literature is the use of a three-tiered theoretical framework that proposes the analysis of crime and organizational deviance on macro-, meso- and micro-levels of analysis (Kramer and Michalowski 1990). The macro-perspective emerges from political economic approaches that locate criminogenic forces within the structure of capitalism and that create incentives for organizations to achieve profit using illegitimate means (Barnett 1981; Michalowski 1985). At the meso-level, the analysis is underpinned by a view of organizational deviance as the product of organizations' emphasis on goal attainment (Finney and Lesieur 1982), as the result of defective standard operating procedures (Hopkins 1978), or as consequence of organizational structure (Kramer 1982). The micro-level, in turn, is influenced by Sutherland's (1949) theory of differential association and the individual learning of deviant activities. Kauzlarich and Kramer (1998) further elaborated the framework by linking the three levels of analysis (macro-, meso-, micro-) with three catalysts for action: (a) motivation; (b) opportunity structure; and (c) operability of control, which has been adjusted by Rothe and Mullins (2009) to include distinctions between controls and constraints, by Rothe (2010) to include an international level of analysis, and by Bradshaw (2014), who has proposed an industry-specific level to tease out variations within specific economic activities. As per the core logic of the framework, a goal-oriented individual operating in an organization that prioritizes economic performance in a society that is structured around goal attainment will be more likely to pursue deviant means than if one of those conditions is not present.

Both bodies of the literature (state-corporate crime and crimes of globalization) have arrived at a crossroads with further progress being prevented in two ways. First, very few case studies in either area have been able to access individuals or organizations under study (with the exception of Lasslett (2014)) and, as a consequence, are reliant on secondary data sources—a problem acknowledged by two of its principal authors (Kramer and Michalowski 2006: 245). This problem is especially acute in the crimes of globalization literature, which offers no empirical data on the organizational setting of the IFIs and the internal processes that lead to these institutions supporting individual infrastructure projects. Given that the IFIs are essentially credit-granting financial institutions operating under a specific policy remit, there is no information on how the institutions make individual credit decisions, nor any perspective on the internal worlds of the organizations—both clear blind spots in the current literature. Later in this article, I will address this omission by identifying three shortcomings related to internal EIB processes and its organizational structure that contributed to the bank supporting the Castor project without properly assessing the technical risks the project posed.

Second, a long-lasting critique aimed at the state-corporate crime research has been made by Lasslett (2010: 227), Tombs (2012: 175) and Whyte (2014: 237), all of whom argue that the existing literature is overly focused on explaining spectacular events, or discrete acts, at the cost of unpacking the social relationships that produce them—or as per Tombs' (2012: 175) invocation of Mathiesen (2004: 37), “to cut the event out of the fabric

in which it exists.” In order to attend to this critique, I will argue that EIB support for the Castor project must be understood as a product of postfinancial crisis economic conditions and the increasing ways in which infrastructure projects are connected to financial markets through the process of “financialization”—a concept that seeks to interpret the shift in the global economy from profit accumulation based on production to accruing profits through financial channels and financial engineering. This article, therefore, will situate the Castor project within the ascendancy of “financialization” as an emerging economic force.

Research Strategy

The research I undertook on the Castor project was an individual case study forming part of a PhD study which, at its core, was an attempt to understand the harms created as the result of EIB-financed infrastructure projects and then to interpret them using criminological concepts and theory (Beizsley 2019a, b). Soon after beginning the research process, I decided on using the case study research strategy which, according to Yin (1994), consists of empirical enquiries into contemporary phenomena suitable for undertaking detailed investigations into events, industries and organizational processes. Vaughan (2007: 17) suggests that the strategy, when applied to organizational research, “can expose macro-level influences, micro-processes, and cultural influences external and internal to the organization” or, as per Hartley (2004: 209), “provide analysis of the context and processes involved in the organization under study.” The case study strategy was identified as the most appropriate method to explore EIB inter-departmental relationships and decision-making on its governing bodies and to understand the internal processes that led to the EIB taking the decision to support the Castor project.

In order to provide the data needed for the inquiry, the study employed two methods. First, I conducted eighteen semi-structured interviews with EIB officials in Luxembourg between September 2016 and June 2017 in bars, restaurants and homes of EIB officials and, in some cases, via Skype. All interviews were conducted in English—the bank’s main working language. Participating EIB officials were recruited informally as a result of the EIB’s official refusal to engage with the study and subsequent attempts to enforce a blanket ban on EIB officials taking part in interviews. I have elsewhere written about the methodological issues that arise when researching large organizations that resist being researched and the steps the EIB took to frustrate the research (Beizsley 2019a, b). The somewhat limited sample pool was deemed sufficient in the context of a difficult, even hostile, research environment and was offset by the substantial length of interviews (one-to-three hours in duration), by discussions on both the technical and commercial aspects of the EIB’s support for the Castor project, and because it involved EIB officials from a range of directorates and positions within the organizational hierarchy.

Second, I downloaded and analyzed documents from institutional databases and webpages of the EIB, other EU institutions, and relevant Spanish public authorities, as well as documents obtained through freedom of information requests (FOIs). As a large bureaucratic organization with over 3000 employees, the EIB produces vast amounts of documents used for various functions, such as inter-departmental communication, internal policy documents and evaluations, minutes of meetings and project appraisals. Although the majority of these documents are beyond the reach of researchers, as a public body, the EIB

does publish certain project-specific information, which allowed me to collect a sufficient amount of Castor project-related information.

The two criminological sub-fields that most inform this article (state-corporate crime and crimes of globalization) also use documents in this way (as do studies from outside of criminology that focus on IFIs, such as Babb (2009) and Weaver (2008)), which allows the researcher to create a chronology of decisions and events that can be used to facilitate the analysis of actors and processes connected to those decisions and events. In order to improve the analysis, I undertook a process of triangulation at several stages during the research process. This increased convergence and corroboration through different data sources and methods and, as per Patton's (1990) recommendation, allowed the research to avoid reliance on a single method, a single source, or a single investigator's bias. To achieve this, I collected and used documents produced by EU institutions, private companies and the financial press as the basis designing questions for respondents relating to how EIB officials experienced events and processes.

I then applied this principle backwards—if an interviewee remarked on the importance of a particular EIB department or process with regard to one event in the EIB credit-granting process, then that gave me the impetus to try and identify EIB documents that (a) discussed the same event; or (b) offered a counter narrative. In this sense, both methods were used to generate new data that would have been unavailable or overlooked by me if triangulation had not been used in this way. I also applied triangulation when analyzing interview transcripts: often respondents made claims which, due to their sensitive nature, required me to substantiate them elsewhere either through documentation or additional accounts. Regrettably, some interview data could not be used because such data could not be triangulated with other sources. This was, at times disappointing, as data relevant to the research question had to be omitted in order to maintain the data's overall validity. With access to more time and respondents, this may have been resolved. The analysis of the two data sources took place between September 2017 and January 2018 using NVivo coding software.

The EIB Appraisal Process and Its Mishandling of the Seismic Risks Posed by the Castor Project

IFIs investing in infrastructure projects undertake appraisals in order to better understand the economic rationale underpinning a particular project, the technical requirements and possible risks the project poses, and the ability of the promoter to implement the project and repay the loan, as well as customer due diligence checks in order to safeguard the lending institution from any reputational risks. It is only when IFIs obtain sufficient detail about a project's implications and predicted outcome that it will disburse a loan. This part of the article will present an overview of the EIB project appraisal process before identifying three factors that contributed to the EIB failing to recognize the significance of the seismic risk that the Castor project posed.

EIB Appraisal Process

EIB involvement in the financing of a project is subject to an extensive appraisal process involving specialists from several of its directorates. Prior to commencing the full process, an EIB loan officer conducts an informal screening of the project, using a checklist to identify whether the project is broadly consistent with EU law and environmental

policy. This screening process allows the EIB to identify areas of a project that pose specific issues or risks (compliance, regulatory, technical) that will need to be resolved during the full appraisal stage. If a project passes the initial screening stage, a team is assigned to the project, consisting of an EIB loan officer from the Operations Directorate (the commercial wing of the EIB) and technical specialists (an engineer and an economist) from the Projects Directorate.

Each project is assessed according to its compliance with EU and member state legal and regulatory frameworks, its potential contribution to EU policy objectives and its economic rationale, as well as a customer due diligence screening to ensure the EIB meets its obligations under the EIB group anti-money laundering framework to prevent the bank from financing criminal activities. Once the appraisal has the agreement of the Director-Generals of the Projects and Operations Directorates, a financing proposal is submitted to the Management Committee for a first board-level vote. If successful, it is elevated to the Board of Directors for a final vote, which, if passed, leads to the loan being formally approved by the EIB, at which point the funds can be disbursed.

Large infrastructure works undertaken within the EU, such as the Castor project, require a full Environmental Impact Assessment (EIA) in accordance with EU law, in addition to any further requirements at the member state level. When the EIB is involved in projects, it does not undertake its own technical EIA study. Instead, it checks whether the promoter's technical appraisal has been conducted in accordance with all the relevant legal, regulatory and technical frameworks. In this sense, it undertakes a compliance review. In the case of the Castor project, this was performed by the EIB between late 2009 and July 2010 (European Investment Bank 2018: 47). Critically, the seismic risk that the Castor project posed was never adequately assessed during the EIB appraisal process nor was it considered by the EIB decision-making bodies. This section will establish three internal organizational factors that led to this occurring.

Overreliance on the Lenders' Technical Advisor

At an early stage during the project cycle of large infrastructure works, the lender and project promoter appoint an independent technical engineer to assess the project—known as the “lenders’ technical advisor” (usually paid for by the promoter). The advisor is contracted to provide a neutral technical assessment of a project's risks, which allows promoters to obtain the necessary permits and for the lender to understand the technical risks before signing a loan agreement. In the case of the Castor project, in 2008, the project promoter, ESCAL UGS, appointed the Spanish company, URS Corporation S.A., to undertake the technical assessments required by EU and Spanish law. Critically, during these technical assessments, the seismic risks related to injecting gas into the undersea reservoir were not included in any of the dynamic simulation modeling, despite warnings presented by Spanish geologists during the project's consultation stage, who flagged the potential seismic risks but whose findings were deemed as “lacking any scientific merit” by the promoter (European Investment Bank 2018: 31–34). This meant that in 2009, when Spanish authorities granted the permit for work to begin on the Castor project, the seismic risks had already been excluded from the technical assessment that would form the basis of the EIB appraisal.

This close relationship between the lenders' technical advisor and the project promoter was identified by EIB officials, who expressed doubt as to the independence of the technical studies:

The problem is that the independent engineer is paid by the promoter and most of the time there is an office within the promoter's facilities. They are staying there for 10 years. They want to keep good relations so they will never report anything against the company. This is one of the major problems in international project financing. The company in charge of the control for the banks is chosen by the developer so there is no independent control. [EIB Official 9]

Most of the engineers sit within the company so there is quite often a conflict of interest. The companies that do this work are too close to the project promoters. [EIB Official 10]

The EIB's dependence on the lenders' technical advisor appointed by the promoter is confirmed in the EIB internal report (European Investment Bank 2018: 40), which reveals that the EIB did not seek additional specialized technical information from any other source. As a result, the only technical information the EIB received regarding the potential seismic risks was from a company in which there was a conflict of interest with the promoter, while other scientific studies pointing to the potential risks were marginalized.

Compliance-Focused Appraisal Process

The second factor that led to the seismic risks of the Castor project being overlooked was the EIB's over-reliance on a compliance-based review of the technical study provided to it by the project promoter. During 2008, ESCAL UGS undertook its technical assessment of the Castor project in accordance with the appropriate legal and regulatory frameworks (at EU and Spanish level), which was later checked by the EIB as part of its compliance review. When the original EIA was undertaken in 2008, however, the European regulatory framework for underground gas storage facilities did not address seismicity issues relevant to the Castor project, nor were there any clear industrial standards or guidelines relating to seismic risks in similar gas storage installations (European Investment Bank 2018: 35). Gutner (2002: 124), in her research on the EIB, has observed that the narrow focus of the EIB appraisal process means it is overly reliant on compliance with existing standards resulting in the possibility of its appraisal processes losing sight of broader questions relating to projects' technical risks. In this instance, by focusing on the Castor project's compliance with an incomplete technical regulatory regime, the EIB failed to answer broader questions on the safety of injecting gas into the seabed in proximity to a geological fault line.

During interviews, one EIB official suggested that the compliance focus of appraisals is driven by time constraints during the appraisal process:

We have to take into account that the environmental studies are like the bible in terms of volume. They are long documents and it's materially impossible that the projects directorate can review every part of the report. So, what they do is that they ensure things are done in accordance with the law, and EU directives—and in this respect, Castor was checked. They looked at the environmental studies done by the project promoter, and that the national laws and EU directives were followed. [EIB Official 14]

One safeguard, which might have alerted the EIB to the seismic risk at this stage of the appraisal, is the EU's "precautionary principle" enshrined in Article 191 of the Treaty on the Functioning of the European Union and operationalized in the EIB Statement of

Environmental and Social Principles and Standards. The principle outlines the EU's approach to risk management in situations when (a) projects contain potential for harm to populations and the environment; and (b) there is no scientific consensus or specific guidelines. The EIB report, however, confirms that the precautionary principle was not triggered in relation to the Castor project even when there were substantial gaps in scientific knowledge (European Investment Bank 2018: 8). In the same way as in the previous subsection, this led to the EIB being reliant on the information provided to it by the Lenders' Technical Advisor.

Distance Between the Intricacies of the Project and the EIB Board of Directors

The third factor is related to the EIB's corporate governance structure and its impact on the EIB's internal decision-making process. In contrast to the US- or Anglo-tradition, the EIB organizational structure is based on the German/Dutch dual-board system, in which executive and nonexecutive directors sit on separate boards. In this system, the EIB Management Committee is the executive body responsible for the bank's day-to-day operations and takes the first board-level vote on projects. If agreement is reached at this level, projects are considered by the EIB Board of Directors. This second, nonexecutive body, is comprised of senior civil servants from the member states acting as part-time directors who attend board meetings on a monthly basis at EIB headquarters in Luxembourg, in addition to their home country responsibilities.

The separation between the two boards created a significant distance between the intricacies of the project identified during the appraisal process and the EIB board of directors. In 2010, the Castor project was first approved by both EIB boards on the basis of a €600 million lending facility (European Investment Bank 2018: 16). Then, when the project was identified as a candidate for the Project Bonds Initiative, it went through another round of approvals by the Management Committee and the Board of Directors, which concluded in 2013. The 2013 approval, however, was based on the original 2009 technical appraisal and did not include any additional updates to the original. By this time, aspects of the regulatory regime affecting underground gas storage had been enhanced with the introduction of the Carbon Capture and Storage Directive (2009/31/EC) and its accompanying guidelines, as well as by several EU-funded projects on CO₂ storage, such as CO₂Qualstore and CO₂Wells (European Investment Bank 2018: 32).

By the time the final approvals were made by EIB directors, seismic risks had not been considered at any point over a *four-year period*, creating a clear distance between the intricacies of the project and the Board of Directors' knowledge of it. This dynamic was observed by EIB officials, who identified the short amount of time available to the Board of Directors to analyze the projects as a contributing factor as to why they were often unfamiliar with the technicalities of projects:

It's very difficult to approach individual projects when you only have them on your table some weeks in advance of the Board, you don't have time to read them. Even if you do read them, you don't really have an accurate idea because you haven't followed the project from the beginning. It's only on paper. [EIB Official 15]

If you look at the list of projects going through the EIB board any month, whether it be 50 projects—you say “my god—did this guy read all 200 pages of all 50 projects?” Well, no. But he has systems to identify where the problems are and hone in on them. [EIB Official 7]

Because the EIB Board of Directors is not a technical board, it relies on the potential dangers of projects being flagged during the appraisal process which then forms the basis of an informed decision of whether EIB support should be offered. In the case of the Castor project, however, the seismic risks had already been excluded from the process during 2009–2010 and, therefore, the EIB directors were not alerted to its risks before taking the final decision on EIB involvement.

The three factors outlined in this section draw attention to the ways in which IFIs can fail to assess adequately the technical risks posed by infrastructure projects. With regard to the Castor project, the project promoter factored out the seismic risks very early in the appraisal process, but this was worsened by the EIB missing opportunities to obtain additional technical information in the context of a somewhat threadbare and evolving regulatory environment. These two factors combined so that when the final decision regarding EIB involvement was taken in 2013 by EIB directors, the seismic risk had not been factored into its decision-making process in any significant way.

The Political and Economic Context of the Castor Project

EIB support for the Castor project can be understood only within the specific economic and political circumstances produced by the global financial crisis of 2007–2008 and its aftermath. After the initial shock, Europe entered into a period of stagnation, revealing the extent to which EU countries' budgets had become strained by operating shortfalls and structural mismatches between revenues and expenditure needs (Ashton et al. 2012: 302). Investment in infrastructure had slowed during this period due to constraints on member state budgets, new capital controls on banks, and the retreat of traditional sources of infrastructure investment (Ernst and Young 2015: 3)—all within the context of widespread short- to mid-term uncertainty in the infrastructure market. In response to this economic malaise, the EU turned to investment in infrastructure as a way out and in a bid to restore Europe's economy to growth.

What emerged from the EU Commission was the Connecting Europe Facility (CEF)—a new policy framework consisting of four initiatives designed to promote investment in infrastructure with the objective of addressing Europe's infrastructure finance gap. One of the strategies proposed was a pilot scheme named the Project Bond Initiative (or PBI, as noted above)—a new instrument aimed at expanding the quantity of PPP infrastructure projects across the continent with the objective of raising investment, stimulating growth and creating jobs. Based on a bond issuance model, the PBI instrument would draw on €230 million of EU budget funds, which the European Commission hoped would leverage €4.5 billion of private sector investment (European Investment Bank 2012: 5). As per the PBI instrument, the EU Commission defined the sectoral eligibility (e.g., energy, information and communications technology (ICT), transportation) and provided a capital contribution. The EIB's role, in contrast, would be to select, appraise and monitor the implementation of projects. If the pilot phase were to be successful, it would be expanded with the aim of eventually precipitating the creation of a pan-European market in infrastructure bonds (Bassanini et al. 2011).

As per the design of the PBI instrument, project promoters raise funds by issuing bonds on capital markets to finance a project's construction costs. The bonds are purchased by institutional investors, such as pension funds and insurance companies. EIB participation occurs through its purchase of a significant amount of the issued bonds as an "anchor

investor” that, in turn, sends a signal to the market of its commitment to the project resulting in an upgrade in the bond’s rating (from BBB– to BBB+) by the credit rating agencies to a threshold considered “investment grade” by other investors (Ernst and Young 2015: 87). In the case of the Castor project, ESCAL UGS, the project promoter, issued €1.4 billion worth of bonds in August 2013 through a special purpose vehicle in Luxembourg.¹ Investors purchasing the bonds would benefit from a 5.7% bond yield over twenty years. The EIB purchased €300 million of the bonds; the rest were purchased by thirty unknown investors based mainly in Europe.

An integral aspect of the PBI instrument was the Project Bond Credit Enhancement (PBCE) feature, which performs as an EU budgetary guarantee (up to €200 million) to cover the first tranche of any losses on the part of the project promoter relating to cost overruns or inability to pay interest payments on the bonds. In the case of the Castor project, investors cited the PBCE guarantee as central to their decision to purchase the bonds—especially by smaller insurance companies and pension schemes unable to undertake the required due diligence on a project whose prospectus was being circulated to investors just weeks before the bond issuance took place (Ernst and Young 2015: 89).

The safety net afforded to the project through the PBCE element of the PBI instrument was, however, superseded by the more substantial investor guarantee framework established at the Spanish level through two Royal Decrees (Article 5.3 of Decree ITC/3995/2006 and Article 14 of Decree 855/2008C), which gave the concessionaire the right to return the project to the state and be compensated according to the notebook value (i.e., total value of the project at that point)—even in cases of fraud or negligence. This is significant insofar as the EIB, in its publicity materials disseminated prior to the project, presented itself as assuming some of the risk associated with the project, whereas its investment was always going to be protected by the more extensive Spanish framework. This point was identified in interviews with EIB officials:

The law that launched the Castor project had a clause by which if everything failed—the government would bear the cost. It is very easy for a project to fail—nobody has any incentive to fix anything along the way because if everything fails then it’s public money which is going to bear the cost. Why was this clause here? It was written in law...the EIB saw a chance of making a profit. And when the time came to get out, they got up and they went... Castor was basically a risk-free investment. [EIB Official 15]

The concession agreement—a royal decree—it was a law. It was a law that settled that right. And this was indeed an element of comfort for the lenders, and the Bank, to support the project. [EIB Official 14]

After the earthquakes led to the suspension of the project, ESCAL UGS sought permission from the EIB to return the concession to the state, which in turn, triggered the compensation payment. The EIB’s investment was then reimbursed representing the end of its contractual relationship with the promoter. The existence of the Spanish level investor compensation framework undermined the EIB’s claim to be performing the role of a guarantor through the PBCE; instead, the EIB’s involvement in the Castor project was made

¹ A special purpose vehicle (SPV) is a subsidiary company created by its parent to undertake specific business activities. A company could establish an SPV in a specific country in order to trade there temporarily or as a legal requirement of that particular jurisdiction. By being separate from the parent company, its assets are secure even if the parent goes bankrupt.

on the same basis as that of private investors, i.e., without risk. The Spanish safety net had already assumed all of the financial risk and so whatever the result of the project, investors' financial commitments would be protected. The conflict between these two guarantees established the macro-level conditions that removed the incentive for the EIB to handle the seismic risk with caution and trigger the "precautionary principle" insofar as its investment was guaranteed irrespective of the project's eventual outcome. In the next section I will explain how such guarantees in infrastructure finance form part of an extractivist logic underpinning the process of "financialization"—a concept which has much to offer the state-corporate crime and crimes of globalization literatures.

Theoretical Implications: "Financialization" and Extractivism

Within the crimes of globalization literature, research to date has not engaged in a substantial manner with the internal processes and organizational structures of relevant IFIs. In the current work directed at IFIs, it is not clear whether this is due to the difficulties of obtaining access or through a lack of interest (e.g., Ezeonu 2008; Friedrichs and Friedrichs 2002; Rothe et al. 2008; Rothe 2010) and, as a consequence, there has been little development at the meso-level of the proposed integrated theoretical framework. Within the state-corporate crime literature, such "organizational theory" is similarly absent, save for references to the contributions of Ermann and Lundman (1978), Gross (1978), Hopkins (1978), Kramer (1982) and Vaughan (1982) that focus on the role of organizational structure, goals and defective standard operating procedures (SOPs) that facilitate deviant state and corporate conducts. The empirical results presented earlier in this article, while lending support to the work of Hopkins' (1978) results on relationship between defective SOPs and organizational deviance, explain only partially the EIB's mishandling of the seismic risks relating to the Castor project. As a consequence, it is necessary to interpret the macro-level influences that push credit-granting institutions to support specific infrastructure projects. By shifting the focus to the macro-level, I will attempt to address the critique presented by Lasslett (2010), Tombs (2012) and Whyte (2014) (introduced in the fourth part of this article) on the failure of the current state-corporate crime literature to "understand the substantive social forces that inform these immediately perceived realities." (Lasslett 2010: 227). In order to do so, this part will argue that EIB support for the Castor project should be understood within the context of the ways in which infrastructure is becoming increasingly financialized as a consequence of a growing shift in the economy from production to finance-led growth.

Broadly, "financialization" explains the transition in the global economy from industrial to finance-led capitalism (Van Der Zwan 2014) through a pivot toward "a pattern of accumulation in which profits accrue primarily through financial channels rather than through trade and commodity production" (Krippner 2011: 174), which takes place within the context of the "increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies" (Epstein 2005: 3). Arrighi (1994), among other scholars, observes this shift as a response to greater international competition for financial institutions in the twilight of the twentieth century which, in turn, forces them to rely ever more on accruing profit from interest, dividends and capital over productive areas to maintain profits.

Focusing specifically on "financialization" and its effects on infrastructure, Ashton and colleagues (2012) view the process as a deepening of the relationship between finance,

financial markets and infrastructure—claiming that the financial system now drives asset ownership and operation of infrastructure through the demands of a secondary market in infrastructure bonds. This results in further disconnects between the ownership of infrastructure projects and its underlying basis (Bayliss 2014: 7). The process of refinancing the Castor project through the PBI instrument (by converting project equity into bonds to be issued and then traded on capital markets) is consistent with the way in which infrastructure is being repurposed by “financialization.”

In Europe, the “financialization” of infrastructure can trace its origins to the 1970s, when public investment in infrastructure relative to Gross Domestic Product (GDP) decreased (Välilä et al. 2005) which, in turn, created the conditions for increased private sector involvement in the provision of infrastructure and then the arrival of PPPs. PPPs, which were pioneered in the UK, have been actively promoted by the EU since the 1990s through the EU Commission’s development of legislative and regulatory frameworks that create incentives for their use in member states (Hall 2008: 7). Beginning in 1990, the EIB, as the EU’s finance arm, has been a major source of finance for PPPs which, by 2012, had expanded to a portfolio worth €30 billion (European Investment Bank 2012: 6). Where PPP-financed infrastructure projects become financialized is through the emergence of secondary markets in which investors trade equity in physical infrastructure projects. Such speculative trading through equity transactions and interest rate swaps generates additional rent from the underlying asset (i.e., the revenue stream from the project) with a whole army of consultants, financial advisers and lawyers on hand to extract fees (Whitfield 2016).

Underpinning the “financialization” of infrastructure (and critical to understanding the Castor project) is the function performed by investor protection frameworks that guarantee payments from public bodies to investors, irrespective of the project’s actual performance which, if worse than predicted, leads to the generation of public debt to guarantee investors’ profit. Harvey (1978) has long since observed the necessity of states or public authorities to finance and guarantee long-term, large-scale projects, while such protections have expanded in scope and complexity to include arbitration clauses, credit enhancements, minimum-revenue guarantees, securitizations and tax breaks that are necessary to provide legal certainty to underpin revenue streams that increased “financialization” requires.

Hildyard (2016) views these guarantees as a form of “financial extraction” that seek, consolidate and entrench capital flows from the public sphere to private investors. Using this lens to view the Castor project, we can see that the logic of extraction can be evidenced in the establishment of the extensive Spanish investor protection framework but also in the (unused) PBCE guarantee based on EU budget funds. Securitizing the underlying asset is therefore necessary to prop up the creation of a secondary market where further accumulation (or extraction) can take place through the process of “financialization.” Understood this way, the Castor project disaster should not be viewed solely as a due diligence failure on the part of the project promoter, the Spanish state and the EIB, but as following the trajectory of capitalism toward a financialized mode based on extractivist logic.

Unpacking “financialization” in this manner and tracking its impact on infrastructure should contribute toward enhancing the macro-level theoretical models used in the state-corporate crime and crimes of globalization literature. Whereas prior research in this area has struggled to venture beyond locating events as the product of the more nebulous terms, such as “globalization” or “neoliberalism,” “financialization” offers a more precise lens through which to observe the relationship between patterns of accumulation and elite deviance and, as a result, contributes to fulfilling the original promise of the state-corporate crime theoretical framework (Kramer and Michalowski 1990).

Discussion

Building on the work of Caneppele and colleagues (2013), Schotter and Rhineberger-Dunn (2013), and Sergi and South (2016), this article has presented infrastructure projects and infrastructure finance as two underexplored areas worthy of enhanced criminological attention. These two areas are highly criminogenic and in Spain can be observed in the country's severe mismatch between supply and demand of large infrastructures (e.g., abandoned airports, high-speed trains running at low capacity) that have been connected to corruption and political capture at local, regional and national levels (Bel et al. 2014). Any increased engagement with infrastructure and deviance should also be undertaken on a supranational level through more studies on the financing activities of the IFIs—in particular, on the EBRD, the IMF and the World Bank Group, with the aim of expanding knowledge on their internal processes, organizational structures and appraisal processes in order to understand why IFIs consistently support projects that cause avoidable harms to the communities hosting them—thus far absent from the crimes of globalization case studies. In addition, the scope of organizations under study should be expanded to include institutions belonging to nation states that operate in the Global South with questionable track records, such as development finance institutions (DFIs) and export credit agencies (ECAs). Beyond producing empirical accounts of these institutions and their internal organizational settings, however, future studies must locate these organizations' lending activities within evolving patterns of accumulation to fulfill the literature's original promise. While this article has advanced the “financialization” as one such evolution, it offers only a partial account.

“Financialization” is not only related to infrastructure and we should not forget it was responsible for the implosion of the US mortgage industry that precipitated the global financial crisis of 2007–2008. The bailout of some of the world's largest financial institutions during the crisis demonstrates the extractivist logic underpinning “financialization” which, despite being the root cause of the crisis, is expanding and penetrating further into other areas of the economy. In Europe, the “financialization” of the housing market seen in the arrival of the private equity industry en masse is driving crises across the continent as residential blocks in cities previously home to families are converted into tradeable liquid assets and left empty, leading to gentrification and the uprooting of communities. Elsewhere, the expansion of student debt underpinned by egregious indebtedness is one of the ways in which education is being repurposed for the needs of financial markets with similar trends occurring in healthcare and urban policy making. If the same is to happen to the data industry in the context of the arrival of artificial intelligence (AI), it is not hard to imagine the “financialization” of the entirety of our daily experience. In response, critical criminologists should position themselves at this point in order to make clear connections between “financialization” and the harms it causes to communities, but they should also adopt a more daring research agenda through a focus on the nexus of actors (financial institutions, lobbyists, policy makers) responsible for its promotion.

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References

- Arrighi, G. (1994). *The long twentieth century: Money, power, and the origins of our times*. London: Verso Books.
- Ashton, P., Doussard, M., & Weber, R. (2012). The financial engineering of infrastructure privatization: What are public assets worth to private investors? *Journal of the American Planning Association*, 78(3), 300–312.
- Babb, S. (2009). *Behind the development banks: Washington politics, world poverty, and the wealth of nations*. Chicago: University of Chicago Press.
- Barak, G. (Ed.). (2015). *The Routledge international handbook of the crimes of the powerful*. London: Routledge.
- Barnett, H. (1981). Corporate capitalism, corporate crime. *Crime & Delinquency*, 27(1), 4–23.
- Bassanini, F., Del Bufalo, G., & Reviglio, E. (2011). Financing Infrastructure in Europe Project Bonds, Solvency II and the “Connecting Europe” Facility. Conference paper delivered at the Eurofi Financial Forum 2011. Retrieved July 6, 2020, from https://www.arpinge.it/wp-content/uploads/2014/09/Bassanini-Del-Bufalo-Reviglio_Financing-Infrastructure-in-Europe.pdf.
- Bayliss, K. (2014). The financialization of water. *Review of Radical Political Economics*, 46(3), 292–307.
- Beizsley, D. J. (2019). State-corporate crime reconsidered: A criminological case study of European Investment Bank lending in the EU. Doctoral dissertation, Utrecht University. Retrieved July 6, 2020, from <https://dspace.library.uu.nl/handle/1874/385617>.
- Beizsley, D. J. (2019b). Researching elites at the margins of research ethics frameworks. *Tijdschrift over Cultuur & Criminaliteit*, 9(2), 37–51.
- Bel, G., Estache, A., & Foucart, R. (2014). Transport infrastructure failures in Spain: Mismanagement and incompetence, or political capture? In T. Søreide & A. Williams (Eds.), *Corruption, grabbing and development: Real world challenges* (pp. 129–139). London: Edward Elgar.
- Bittle, S., Snider, L., Tombs, S., & Whyte, D. (2018). *Revisiting crimes of the powerful: Marxism, crime and deviance*. London: Routledge.
- Boukli, A., & Kotzé, J. (Eds.). (2018). *Zemiology: Reconnecting crime and social harm*. New York: Springer.
- Bradshaw, E. A. (2014). State-corporate environmental cover-up: The response to the 2010 Gulf of Mexico oil spill. *State Crime Journal*, 3(2), 163–181.
- Bussière, E., Dumoulin, M., & Willaert, E. (Eds.). (2008). *The bank of the European Union: The EIB, 1958–2008*. Luxembourg City, Luxembourg: Imprimerie Centrale. https://www.eib.org/attachments/general/the_eib_1958_2008_en.pdf
- Caneppele, S., Riccardi, M., & Standridge, P. (2013). Green energy and black economy: Mafia investments in the wind power sector in Italy. *Crime, Law and Social Change*, 59(3), 319–339.
- Clifton, J., Díaz Fuentes, D., & Gómez, A. L. (2017). The European Investment Bank: A new database (19582012). *MPRA Paper No. 78173*. Retrieved July 6, 2020, from <https://mpra.ub.uni-muenchen.de/78173/>.
- Clinard, M. B., & Quinney, R. (1973). *Criminal behavior systems: A typology*. New York: Holt, Rinehart and Winston.
- Dorling, D., Gordon, D., Hillyard, P., Pantazis, C., Pemberton, S., & Tombs, S. (2008). *Criminal obsessions: Why harm matters more than crime*. London: Centre for Crime and Justice Studies.
- Epstein, G. A. (Ed.). (2005). *Financialization and the world economy*. Cheltenham, UK: Edward Elgar Publishing.
- Ermann, M. D., & Lundman, R. J. (1978). Deviant acts by complex organizations: Deviance and social control at the organizational level of analysis. *The Sociological Quarterly*, 19(1), 55–67.
- Ernst & Young. (2015). *Ad hoc Audit of the pilot phase of the Europe 2020 Project Bond Initiative*. Ernst & Young document. Retrieved July 6, 2020, from https://ec.europa.eu/dgs/economy_finance/evaluation/pdf/eval_pbi_pilot_phase_en.pdf.
- European Investment Bank. (2012). *An outline guide to Project Bonds Credit Enhancement and the Project Bond Initiative*. EIB policy outline. Retrieved July 6, 2020, from https://www.eib.org/attachments/documents/project_bonds_guide_en.pdf.
- European Investment Bank. (2013). Statute and other Treaty provisions. EIB statute. Retrieved July 6, 2020, from http://www.eib.org/attachments/general/statute/eib_statute_2013_07_01_en.pdf.

- European Investment Bank. (2018). Castor Underground Gas Storage Spain Complaint SG/E/2013/12. EIB Complaints Mechanism report. Retrieved July 6, 2020 from <https://www.eib.org/attachments/complaints/2018-03-20-letter-from-eib-sg-to-complainant-sg-e-2013-12-final-reply-annex-conclusions-report-en.pdf>.
- Evertsson, N. (2017). State aid and taxation of transnational companies: A study of state-corporate crime. *Critical Criminology: An International Journal*, 25(4), 507–522.
- Ezeonu, I. (2008). Crimes of globalization: Health care, HIV and the poverty of neoliberalism in sub-Saharan Africa. *International Journal of Social Inquiry*, 1(2), 113–134.
- Finney, H. C., & Lesieur, H. R. (1982). A contingency theory of organizational crime. In S. B. Bacharach (Ed.), *Research in the sociology of organizations* (pp. 255–299). Greenwich, CT: JAI Press.
- Friedrichs, D. O. (2018). Crimes of globalization and Asian dam projects. In S. Bittle, L. Snider, S. Tombs, & D. Whyte (Eds.), *Revisiting crimes of the powerful: Marxism, crime and deviance* (pp. 231–242). Abingdon, Oxon, UK: Routledge.
- Friedrichs, D. O., & Friedrichs, J. (2002). The World Bank and crimes of globalization: A case study. *Social Justice*, 29(1/2), 13–36.
- Gross, E. (1978). Organizational crime: A theoretical perspective. In N. Denzin (Ed.), *Studies in symbolic interaction* (pp. 55–85). Hoboken, NJ: Wiley.
- Gutner, T. L. (2002). *Banking on the environment: Multilateral development banks and their environmental performance in Central and Eastern Europe*. Cambridge, MA: The MIT Press.
- Hachez, N., & Wouters, J. (2012). Responsible lender—the European investment bank's environmental, social and human rights accountability. *A. Common Market L. Rev.*, 49(1), 47–95.
- Hall, D. (2008). PPPs in the EU—a critical appraisal. Public Services International Research Unit. Conference paper. Retrieved July 6, 2020, from <https://gala.gre.ac.uk/id/eprint/2880/1/2008-11-PPPs-crit.pdf>.
- Hartley, J. (2004). Case studies in organizational research. In C. Cassell & G. Symon (Eds.), *Essential guide to qualitative methods in organizational research* (pp. 208–229). Thousand Oaks, CA: Sage.
- Harvey, D. (1978). The urban process under capitalism: A framework for analysis. *International Journal of Urban and Regional Research*, 2(1–3), 101–131.
- Hildyard, N. (2016). *Licensed larceny: Infrastructure, financial extraction and the Global South*. Oxford: Oxford University Press.
- Honohan, P. (1995). The public policy role of the European investment bank within the EU. *Journal of Common Market Studies*, 33(3), 315–330.
- Hopkins, A. (1978). The anatomy of corporate crime. In P. R. Wilson & J. Braithwaite (Eds.), *Two faces of deviance: Crimes of the powerless and powerful* (pp. 214–229). Brisbane, QLD: University of Queensland Press.
- Kauzlarich, D., & Kramer, R. (1998). *Crimes of the American nuclear state: At home and abroad*. Boston, MA: Northeastern University Press.
- Kramer, R. C. (1982). Corporate crime: An organizational perspective. In P. T. Wickman (Ed.), *White-collar and economic crime* (pp. 75–94). Lexington, MA: Lexington Books.
- Kramer, R. C. (1992). The space shuttle challenger explosion. In K. Schlegel & D. Weisburd (Eds.), *White collar crime reconsidered* (pp. 214–243). Boston, MA: Northeastern University Press.
- Kramer, R. C., & Michalowski, R. (1990). Toward an integrated theory of state-corporate crime. Paper presented at the Annual Meeting of the American Society of Criminology. Baltimore, MD. November.
- Kramer, R. C., & Michalowski, R. J. (2006). *State-corporate crime: Wrongdoing at the intersection of business and government*. Piscataway, NJ: Rutgers University Press.
- Krippner, G. R. (2011). *Capitalizing on crisis*. Cambridge, MA: Harvard University Press.
- Lasslett, K. (2010). Scientific method and the crimes of the powerful. *Critical Criminology: An International Journal*, 18(3), 211–228.
- Lasslett, K. (2014). *State crime on the margins of empire: Rio Tinto, the war on Bougainville and resistance to mining*. London: Pluto Press.
- Mathiesen, T. (2004). *Silently silenced: Essays in the creation of acquiescence in modern society*. Winchester, UK: Waterside Press.
- Michalowski, R. J. (1985). *Order, law, and crime: An introduction to criminology*. New York: Random House.
- Pearce, F. (1976). *Crimes of the powerful: Marxism, crime and deviance*. London: Pluto Press.
- Robinson, N. (2009). The European Investment Bank: The EU's neglected institution. *Journal of Common Market Studies*, 47(3), 651–673.
- Rothe, D., & Friedrichs, D. O. (2015). *Crimes of globalization*. New York: Routledge.
- Rothe, D. L. (2010). Facilitating corruption and human rights violations: The role of international financial institutions. *Crime, Law and Social Change*, 53(5), 457–476.

- Rothe, D. L., & Mullins, C. W. (2009). Toward a criminology of international criminal law: An integrated theory of international criminal violations. *International journal of comparative and applied criminal justice*, 33(1), 97–118.
- Rothe, D. L., Mullins, C. W., & Sandstrom, K. (2008). The Rwandan genocide: International finance policies and human rights. *Social Justice*, 35(113), 66–86.
- Ruiz-Barajas, S., Sharma, N., Convertito, V., Zollo, A., & Benito, B. (2017). Temporal evolution of a seismic sequence induced by a gas injection in the Eastern coast of Spain. *Scientific Reports*, 7(1), 1–15.
- Schotter, C. J., & Rhineberger-Dunn, G. (2013). The I-35 W bridge collapse: crimes of commission and omission resulting from the confluence of state processes and political-economic conditions. *Critical Criminology: An International Journal*, 21(4), 477–492.
- Schrager, L. S., & Short, J. F., Jr. (1978). Toward a sociology of organizational crime. *Social Problems*, 25(4), 407–419.
- Sergi, A., & South, N. (2016). 'Earth, water, air, and fire': Environmental crimes, Mafia power and political negligence in Calabria. In G. A. Antonopoulos (Ed.), *Illegal entrepreneurship, organized crime and social control: Essays in honor of professor Dick Hobbs* (pp. 85–100). New York, NY: Springer.
- Stanley, E. (2008). *Torture, truth and justice: The case of Timor-Leste*. London: Routledge.
- Sutherland, E. H. (1949). *White-collar crime*. New York: Holt, Rinehart, Winston.
- Tarantino, T., & Gerebizza, E. (2012). European public support ending in corrupt infrastructure. The case of Passante di Mestre Highway Bypass in Italy. Libera and Re: Common report. Retrieved July 6, 2020, from <http://www.tieproject.eu/wordpress/wp-content/uploads/tackling/tie2.pdf>.
- Tombs, S. (2012). State-corporate symbiosis in the production of crime and harm. *State Crime Journal*, 1(2), 170–195.
- Välilä, T., Kozluk, T., & Mehrotra, A. (2005). Roads on a downhill? Trends in EU infrastructure investment. *EIB Papers*, 10(1), 19–38.
- Van der Zwan, N. (2014). Making sense of financialization. *Socio-Economic Review*, 12(1), 99–129.
- Vaughan, D. (1982). Toward understanding unlawful organizational behavior. *Michigan Law Review*, 80(7), 1377–1402.
- Vaughan, D. (2007). Beyond macro and micro levels of analysis, organizations, and the cultural fix. In H. Pontell & G. Geis (Eds.), *International Handbook of White-Collar and Corporate Crime* (pp. 3–24). New York, NY: Springer.
- Weaver, C. (2008). *Hypocrisy trap: The World Bank and the poverty of reform*. Princeton, NJ: Princeton University Press.
- Whitfield, D. (2016). The financial commodification of public infrastructure. European Services Strategy Unit: Research Report. Retrieved July 6, 2020, from <https://www.european-services-strategy.org.uk/wp-content/uploads/2017/01/financial-commodification-public-infrastructure.pdf>.
- Whyte, D. (2003). Lethal regulation: State-corporate crime and the United Kingdom government's new mercenaries. *Journal of Law and Society*, 30(4), 575–600.
- Whyte, D. (2014). Regimes of permission and state-corporate crime. *State Crime Journal*, 3(2), 237–246.
- Yin, R. (1994). *Case study research: Design and methods (applied social research methods)* (Vol. 5). Beverly Hills, CA: Sage Publications.
- Zaich, D., & Gomez, L. G. (2015). Mining as state-corporate crime. In G. Barak (Ed.), *The Routledge international handbook of the crimes of the powerful* (pp. 386–397). New York: Routledge.