Original scientific paper
UDK: 330.322: 669.1(343.9:497.11)
DOI: 10.5937/jrs18-45217
Received: 4 September 2023 / Accepted: 26 November 2023

Achilles Steel? Investigating Corrosive Capital in the Smederevo Železara Privatization

READE BEN*
Fulbright Scholar, Belgrade Center for Security Policy, Serbia

Abstract: The term "corrosive capital" has become a popular phrase in Serbia and across the Western Balkans used to describe opaque and scandalous foreign investments that are believed to enable state capture. Particularly in Serbia, existing approaches to corrosive capital have certainly identified which investments are problematic. However, there is still a lack of understanding about which key actors are culpable for corrosive investments and the practices that enable them. Responsibility is often binarily assigned, either to the Vučić regime or non-Western actors. This paper, however, more rigidly explores the networked structures and practices that bring about corrosive capital. Through the development of an analytical framework and an investigation of the Smederevo Železara privatization, this paper argues that corrosive capital is a multi-level phenomenon enabled by interactions between various domestic and foreign actors that leads to state capture. This paper particularly notes how the combined effect of actions taken by Serbia, the EU, and the Chinese firm HBIS has facilitated corrosiveness with respect to the Železara privatization.

Keywords: corrosive capital, foreign direct investment, state capture, Serbia

Introduction

Over the course of the past decade, the term "corrosive capital" has become increasingly prevalent in the vocabulary of international affairs scholars. The term references the "dynamic by which local actors in positions of power are co-opted, ending up working in the interests of foreign investors and… their own pockets while damaging the state coffers and the wider public" (Prelec 2020, 170). In this way, corrosive capital leads to state capture. Corrosive capital is a particularly relevant topic in Serbia, where a plethora of high-level foreign investments have attracted criticism for their various malfeasances, including rule of law violations, corruption, and pollution.

In the media and various academic discourses, corrosive capital has been used as a catch-all phrase for dubious foreign investment projects. There is much debate surrounding whether ideologies or incentives drive corrosive capital. Some see corrosive capital as a

* *reademben@outlook.com*

symptom of authoritarian, anti-Western foreign policies sourced from Moscow and Beijing. Some blame the weak regulatory environments and self-interested officeholders of host countries for the misuse of foreign investments. Others characterize corrosive capital as an issue of both "supply and demand:" investors will simply do what host countries allow, not what is ethical. The existence of these varying approaches indicates the presence of uncertainty in assigning responsibility for corrosive capital. It is unclear to what extent corrosive capital originates from domestic threats, broader political agendas, corporate malfeasance, or potentially other factors. This uncertainty carries significant implications for regional security, as it makes it difficult to pinpoint root causes and develop effective, mitigative strategies.

Clearly, not much is understood about what Prelec describes as "corrosive capital…in practice (Prelec 2020, 168)." Little work has been done to explore the characteristics of corrosive investments or the partnerships that enable them. Thus, this paper asks the research question: "what exactly makes an investment corrosive, and what causes it?" This paper hypothesizes that multi-level interactions between various corporate, national, and supranational actors enable corrosive projects. Furthermore, the behavior of these actors, and the consequences of their behavior, constitute the nature of corrosiveness.

This paper seeks to explore corrosive capital through an analysis of the privatization of the Smederevo Železara steel mill by HBIS, a Chinese firm. Through the lens of its own novel analytical framework, this paper will assess how the practices of Serbia and HBIS, in tandem with a lack of European Union (EU) oversight via the European Commission (EC), enabled an investment with a plethora of problems, including intransparency, rule of law violations, and pollution. Despite these malfeasances, the Železara privatization has been branded as a success story, to the benefit of all actors involved. It is important to note the interests served in this case are political, rather than economic. Regardless, the Železara privatization has occurred at the public's expense, representing a classic case of state capture.

This paper is structured as follows. First, a literature review outlines existing theories of state capture and corrosive capital and then introduces this paper's analytical framework. A subsequent methodology section follows. Next, a background section provides relevant details regarding the Železara steel mill and its privatization. Then, a robust assessment of the Železara privatization will identify the project's various corrosive elements and the linkages that facilitated them. Finally, a conclusion will describe this paper's findings and broader implications.

State Capture and Corrosive Capital

This section will provide robust, analytic definitions for state capture and corrosive capital. Then, this section will develop a novel framework to assess a project's corrosiveness.

The term "state capture" entered the lexicon of international affairs over two decades ago, introduced by Hellman et al. in a research paper for the World Bank (Hellman and Kaufmann 2001). Hellman et al. originally defined state capture as the "the efforts of firms to shape the laws, policies, and regulations of the state to their own advantage by providing illicit private gains to public officials" (Hellman and Kaufmann 2001). Such ill-gotten gains occur at the political and economic expense of the public at-large (Stoyanov and Gerganov 2019, 26; Stojanović-Gajić and Pavlović 2021, 91). Hellman et al. described the unique dimensions of state capture that distinguish it from other forms of corruption (in this case, defined by Dobson Phillips et al. as "the abuse of entrusted power for private gain") (Phillips, Dávid-Barrett, and Barrington 2021, 3). Many types of corruption often seek to influence the implementation of laws via rent seeking and patronage (Stoyanov and Gerganov 2019, 26; Stojanović-Gajić and Pavlović 2021, 91). State capture, however, considers how laws, rules, regulations, and policies are formed (Stoyanov and Gerganov 2019, 26; Stojanović-Gajić and Pavlović 2021, 91). Hellman et al. emphasized how elected officials, government officials, and judges can be purchased to "encode advantages" for firms "into basic legal and regulatory structure(s)" (Stoyanov and Gerganov 2019, 26; Stojanović-Gajić and Pavlović 2021, 91). David-Barret has described the size and scope of state capture, noting that it results in the capture of "core state functions," such as "constitutional and legislative reforms," critical appointments to "key power-holding bodies," and control over the public purse strings (David-Barrett 2023, 227). State capture is a form of "grand corruption" that makes, rather than breaks, the "rules of the game" (Hellman and Kaufmann 2001). In this way, state capture is a positively reinforcing "viscous circle" (Hellman and Kaufmann 2001). The consolidation of power into the hands of narrowly-tailored interests precisely prevents the reforms necessary to undo the effects of state capture. State capture effectively begets more state capture.

Original cases of state capture concerned privatization in post-communist transition states across Central and Eastern Europe. Hellman et al. described "captor firms" as newly-minted "entrants" that used politicians as intermediaries to influence policy formation. In this way, captors were able to compete with "powerful…incumbent firms" established during the communist era (David-Barrett 2021). This form of state capture has been defined as "corporate" state capture, driven by economic elites with economic incentives (David-Barrett 2021). David-Barrett's work suggests that this subset of state capture has traditionally emphasized the importance of a "third party" as a "corrupting influence" for officeholders (David-Barrett 2023, 227). However, a third party is a sufficient, but not necessary, condition for state capture. This has been reflected particularly in instances of "political" state capture, which have become increasingly prevalent in the last decade (David-Barrett 2021). In this iteration of state capture, officeholders secure political and economic gains for themselves, their political parties, and patronage networks.

Pavlović has identified the prevalence of political state capture in Southeastern Europe. Case studies in Croatia, Montenegro, and Serbia reflect how regimes use both public administrative institutions and public funds to build party patronage networks and "organize political machinery to win elections" (Pavlović 2021, 3). In the broader literature, political

state capture has been identified in countries such as South Africa, Hungary Serbia, Sri Lanka, Angola, and more (Haroon Bhorat et al. 2017). In these examples, the politically powerful have captured various state functions to benefit their regimes and inner circles.

However, distinctions between "corporate" and "political" state capture reflect a major oversimplification that fails to encapsulate the true complexity and dynamism of state capture (David-Barrett 2023, 225). One must understand how networks of relevant actors and various incentives influence officeholders to abuse their public duties. Many instances of state capture have often involved elites motivated by a nebulous combination of political and economic incentives.

This is reflected across multiple examples, even early instances of state capture. Wedel noted particularly how "informal social networks" influenced incentives within post-communist transition states (Wedel 2001, 2–3). In a turbulent environment, elites relied on trust-based, multi-purpose patronage networks for information and favors, both political and economic (Wedel 2001, 2–3). Wedel described these networks as "dense and multiplex" (Wedel 2001, 2–3). Their members were largely "institutional nomads" who moved between private and public sectors, allegiant to their "clique" rather than their political or business roles (Wedel 2001, 4). Early literature addressing transition countries detailed the existence of such economically and politically incentivized informal networks in Poland (the *srodowisko*, or "social circle"), Russia (the "clan system"), Romania ("unruly coalitions"), and Hungary ("restructuring networks") (Wedel 2001, 2–4).

Bhorat et al. argued that these informal networks constitute a "shadow state" that exists symbiotically with the "constitutional state," reserving power and influence for the select few (Haroon Bhorat et al. 2017, 4). This is evidenced through the politically and economically incentivized capture of the South African state through an elite network centered around President Jacob Zuma and a web of various business elites (such as the Gupta family) (Haroon Bhorat et al. 2017, 56–57). The complex reality of state capture has certainly not escaped the Western Balkans, specifically Serbia. Petrović notes that the Vučić regime has "staffed the shadow state," using political appointments in security services to perpetuate further capture, silence the opposition, and enrich his inner circle (Petrović 2021, 164–172). Subsequently, this paper will place an emphasis on the networks, linkages, and partnerships that might enable state capture.

While existing literature outlines the actors, incentives, and symptoms associated with state capture, there have been few attempts to identify the mechanisms and pathways that captors themselves use. In this way, David-Barrett's conceptualization of capture as a cumulative process encapsulated by three pillars is critical. Captors not only seek to influence the formation of policy (the first pillar), but also the implementation of policy (the second pillar) and systems of checks and balances (the third pillar) (David-Barrett 2023, 229–35). David-Barrett described a plethora of mechanisms that might advance these various stages of state capture. For instance, after influencing policy formation, captors can use political appointments and budget allocations to control policy implementation

(David-Barrett 2023, 230–32). As it relates to the third pillar, captors can then also disrupt the "accountability ecosystem" around them, subverting institutions such as the judiciary, free press, and audit institutions (David-Barrett 2023, 230–32).

This paper seeks to add to existing literature in two ways. First, this paper will use the lens of corrosive capital to further enhance David-Barrett's conceptualization of state capture as a multi-pillar process. Second, when it comes to assessing or measuring the degree of state capture, this paper will observe what David-Barrett described as "impact on inequality," because it is a relative measurement of the "distribution of power" (David-Barrett 2021). A comprehensive evaluation of state capture must consider who wins and who loses. Thus, this paper's definition of state capture emphasizes the equation:

State Capture = Elite Gain + Public Loss

"Corrosive capital" (originally coined by the Center for International Private Enterprise) has been used to describe controversial and dubious investment projects. Prelec frames corrosive capital as an arena in which state capture can occur, largely because local actors and foreign investors collaborate to advance their own interests, resulting in costs to "state coffers" and the "wider public" (Prelec 2020, 170; Dimitrov 2018). Pejič defines corrosive capital as a diametric opposite of constructive capital, which is characterized by "transparent financial flows…governed by market principles" (Pejič 2021). A great deal of existing literature focuses on the presence of corrosive capital in the Western Balkans, given that the region is a hotbed of state capture.

Indeed, Marjanović Rudan notes that corrosive capital prima facie is "fueling state capture in the Western Balkans," as it "exploits and expands… existing governance gaps" (Marjanović Rudan 2021, 187). In countries such as Serbia, dubious, high-profile investments are seen as exacerbating existing state capture dynamics. Domestic leaders with consolidated control over state institutions, such as Aleksandar Vučić, use positions of power to attract investors who are seeking quick profits and are willing to bypass regulatory barriers. Marjanović Rudan notes this "regional practice of corrosive capital" is denoted by preferential investor treatment (such as tax breaks), violations of public procurement laws, the exclusion of civil society, and shadowy public-private partnerships (Marjanović Rudan 2021, 187). Thus, domestic leaders not only use these foreign investments to enrich themselves and their parties, but also build political narratives that credit them with facilitating economic development. Marjanović Rudan notes this "whitewashing" of state capture downplays the nefarious and problematic elements of corrosive capital (Marjanović Rudan 2021, 187). Prelec notes how corrosive capital in the Western Balkans contributes to the aforementioned "vicious circle" of state capture (Prelec 2020, 170; Dimitrov 2018). Foreign investments prop up domestic regimes, subsequently attracting more investors seeking to capitalize on favorable conditions and lax standards.

A popular discourse frames corrosive capital as the wicked export of illiberal, non-Western powers, mainly Russia and China (CSD 2018; Corrosive & Constructive Capital Initia-

tive n.d.). This discourse (particularly in the Western Balkans) usually references projects attributable to shadowy, state-led initiatives, such as Russia's energy policy and China's BRI. In this case, corrosive capital is viewed as a byproduct of authoritarian ideology. Corrosive projects are policy tools meant to undermine Western hegemony and EU integration. Prelec argues this discourse dominates the Western Balkan and post-Soviet arenas, where "states…are portrayed as aligned on a geopolitical spectrum between the West and Russia…almost as if between right and wrong" (Prelec 2020, 169). China is also included in this narrative, having recently earned a reputation as "the real predator in the Balkans" for a series of controversial, low-quality infrastructure and mining projects (Mirel 2019; Marusic 2021, 4–6). The prevalent association of corrosive capital with China and Russia tends to imply that Western powers are the exclusive sources of constructive capital. This approach is indeed accurate in identifying the origins of many corrosive projects. However, it creates a false narrative that fails to recognize the many different faces and sources of corrosive capital.

The "East-West" approach to corrosive capital is flawed because it hyper-focuses on great power ideologies. Prelec argues that this approach thus discounts the importance of "pragmatism" in driving investment decisions and inherently absolves Western actors from participating "in adverse influence" (Prelec 2020, 168). The "East-West" discourse subsequently casts out critical actors such as the UAE, a strong Western ally that has funded a plethora of contentious investments (Prelec 2020, 171). The work of Prelec (and Bieber and Tzifakis) can help reframe the discussion of corrosive capital, by emphasizing how "linkages (the relationships)" between Western Balkan states and foreign investors can facilitate corrosive capital (Prelec 2020, 171–172). An analysis of such relationships uses practice theory to emphasize the importance of practices, which Pouliot and Cornut define as "socially meaningful and organized patterns of activities," or "ways of doing things" (Pouliot and Cornut 2015, 241). Prelec notes assessing practices is preferable to institutions because it allows analysis to focus on "patterns" that are "not necessarily formalized" (Prelec 2020, 168). This is of particular importance for studying the Western Balkans (and Serbia), where a blend of informal and formal practices underpins the system of patronage that defines both politics and society in the region.

Prelec categorizes each of the actors in the relationship structure that enables corrosive capital. She does this with the perspective of supply (the entities offering corrosive capital) and demand (and the entities accepting it). Prelec suggests that while both supply and demand elements are necessary for a corrosive project to occur, corrosive capital is largely a "demand side issue" because investment can only "be malign insofar as the local authorities allow it to be" (Prelec 2020, 171). Prelec does not deny that the exploitation of a broken system by foreign powers is problematic. However, much like bacteria on a petri dish, corrosive capital can only flourish where proper conditions exist.

It has been well established that corrosive capital effectuates state capture, and that it occurs via dynamics of supply and demand. However, the process of capture throughout the development of an investment project has not been well mapped. Subsequently, this

analytical framework charts how capture occurs over a project's life-cycle. It assesses the practices that lead to corrosive projects and the consequences of such practices. Furthermore, this framework emphasizes the importance of various linkages in enabling corrosive projects. Using multi-level governance theory as inspiration, this framework will investigate linkages that go beyond those between nation states.

This paper will assess how projects might be shaped by "actors operating at multiple levels" within "an increasingly integrated system of formal and informal rules" (Saito-Jensen 2015, 7). As Petrović notes, the "numerous interrelations" between these actors has potential to create "multiple mechanisms of state capture" (Petrović 2021, 155). This has been confirmed through the work of Tsimmonis et al., which determined that the negative environmental impacts of certain Chinese investment projects in European states (including Serbia) are largely attributable to a "synergy of failures" (Tsimonis et al. 2019, 175–78). This synergy was the combined effect of various mishandlings by various actors, such as disengaged Chinese investors, apathetic host country governments, and EC "ambivalence" in enforcing its own standards (Tsimonis et al. 2019, 175–78). Subsequently, this paper intends to contribute to existing literature by expanding the concept of synergistic failure, exploring how a confluence of various actors and their practices can promote corrosive capital and state capture. This paper will explore linkages between actors at various levels (between and among local, national, and supranational spheres) while also considering how these levels relate to each-other. When assessing corrosiveness, all of a project's stakeholders should be considered.

Influenced by David-Barrett's framework, this paper recognizes that the partnerships enabling corrosive capital generate corrosive elements that can occur at a project's various stages. These elements can be instances of state capture itself, the tangible consequences of state capture, or both. Subsequently, this framework classifies corrosive elements as either causes or consequences. Corrosive causes are manifest in a project's beginning stages. They typically involve a blend of formal or informal practices that create project terms that favor self-interested elites and investors. They may include practices such as a lack of transparency, unconstitutional legislative changes, informal deal-making, and more. Subsequently, corrosive causes can concern policy formation, policy implementation, or the accountability ecosystem. Thus, corrosive causes most directly concern the process of state capture itself. Corrosive consequences are the negative impacts of capture that become manifest after a project's completion. This conceptualization of corrosive capital supports the idea that state capture can occur as a process with lasting, secondary effects.

Categorization	Example	Pillar of Capture	Impact
CORROSIVE CAUSE A practice occurring during a project's beginning stages that contributes to that project's actualization	A lack of transparency surrounding project details and failure to disclose relevant information	Third Pillar	Information monopolies limit a broad and balanced discourse; this concentrates power into the hands of elites
	Hampering civil society and other accountability institutions from performing objective project reviews; silencing the opposition	Third Pillar	Sidelining accountability institutions further removes projects from the arena of public opinion, further consolidating elite control at the public's expense
	Failure to adhere to local, national, and international laws that would otherwise govern a project, such as public procurement procedures or environmental impact assessments	Second Pillar	Rule of law violations (relating to implementation) impede functioning of political and legal institutions; they concentrate power in the hands of elites, creating a precedent for further abuses
	The formation of new laws, policies, contracts, or memorandums that preferentially treat investors and projects	First Pillar, Second Pillar	Preferential treatment uses lawmaking and policy-formation powers to direct gains towards elites rather than the public at-large
CORROSIVE CONSEQUENCE Negative outcomes resulting from a project's completion or investor firm's operations within a host country; effectively the negative consequences of state capture	A continued lack of transparency and sidelining of accountability institutions, especially as they concern a foreign firm's in-country operations and project outcomes	Third Pillar	See above for impact; concerns third pillar capture directly and is also an effect of that capture
	A project's profitability, impact on host country and local economies, and economic benefits for elites	Context dependent	Considering how a project economically impacts elites and the public critical for understanding relative inequality as a product of state capture; capture pillar depends on context (i.e., whether a preferential contract or wavering of existing law created the outcome in question)
	Non-economic, physical project externalities, including pollution, labor exploitation, strain on local resources, displacement, and more	Context dependent	Project externalities, being public-facing, contribute to the public-loss element of state capture, impacting relevant communities and society at large; capture pillar is context dependent

Table 1: *Corrosive Capital: Analytical Framework*

Table 1 provides a more detailed description of causes and consequences. It is worth noting that the items listed in the table are sufficient, but not necessary, conditions for corrosive capital. Each project will have various combinations of corrosive elements. For the Železara privatization, the most prevalent elements investigated will be a lack of transparency, conflicts of interest, the rule of law, and pollution as a negative externality.

Subsequently, the interaction between corrosive causes and consequences is important to consider. Causes, which arise in the early stages of a project, have the potential to trigger corrosive consequences later on. This idea is rooted in neofunctionalist theory, which relies heavily on the concept of spillovers. A spillover is analogous to a chain reaction, where an "original action demands further (and unforeseen) ... actions" (Nugent 2017, 448–50). To consider how this might practically occur, consider a scenario where a project lacks input from professionals and experts during its preliminary planning stages. Without expertise and guidance, critical oversights might occur, which could cause a plethora of various externalities, such as completion delays or an unprofitable project. This reflects what Capussela refers to as a "malfunctioning" system, where the actions of enablers in "one part affects the others" (Capussela 2021, 139). The relationship between causes and consequences may be likened to a type of corrosive inertia. Subsequently, situations where corrosive causes occur may be identified as "critical junctures," or instances where "dramatic change is possible" (Capoccia and Kelemen 2007, 341). Corrosive causes are thus theoretically "critical" because they place projects on "trajectories that are very difficult to alter" (Capoccia and Kelemen 2007, 342). This recognition is important because it allows one to pinpoint critical moments in a project's timeline. This can help with the implementation of proactive policies that address corrosiveness.

Thus far, this paper establishes a few things. It defines state capture as measurable by the relative magnitude of elite gain to public loss. It determines that corrosive capital leads to state capture: the two are inextricably linked. It distinguishes between corrosive causes and consequences. This comprehensive definition of corrosiveness can subsequently be used to identify various corrosive elements. Based on its framework and an assessment of existing literature, this paper posits that highly corrosive projects originate from the joint efforts of investors, domestic officeholders, and other relevant actors. Interactions among parties within networked structures create a whole that is greater than the sum of its parts. The validity of this claim will be explored in the following analysis.

Methodology

This paper employs a mixed methods approach, using quantitative analysis and interviews. This paper uses two semi-structured interviews: one with a civil society leader (Nikola Krstić) and one with a resident of Radinac (Zoran Stojanović). These interviews serve as a valuable complement to this analysis, providing critical details to "patterns observed at the macro-level" (Mosley 2013, 33–35). These interviews enrich the analysis by providing additional depth to claims made in various reports and reports regarding the

Železara privatization. This is especially pertinent given data limitations and a lack of access to certain official documents.

In this paper, the relationship between pollution and non-communicable diseases in Smederevo was investigated by comparing disease metrics with pollution metrics. This paper conducted a Pearson's product moment correlation test and employed linear regressions using R software. The metrics are listed in the table below. These statistical analyses were performed on different combinations of variables to explore their associations (see Table 2).

Pollution Metric (Independent Variable)	Disease Metric (Dependent Variable)
Water Quality	Cancer Prevalence (Total)
PM10 Particle (Pb)	Cancer Incidence (Total, Male, Female)
PM10 Particle (Cd)	New Cancer Cases (Total, Male, Female)
Total PM10 Particle	Cancer Deaths (Total, Male, Female)
Average SO2 Levels	Standardized Cancer Mortality (Total, Male, Female)
Average Soot Levels	Neoplasm Mortality (Raw) (Total, Male, Female)
Average Dust Levels	Neoplasm Mortality / Total Population (Total, Male, Female)
Average Total Pollutant Levels	Respiratory Mortality (Raw) (Total, Male, Female)
Max S02 Levels	Respiratory Mortality / Total Population (Total, Male, Female)
Max Soot Levels	
Max Dust Levels	
Max Total Pollutant Levels	
Steel Exports	

Table 2: *Pollution and Disease Metrics*

This analysis treats pollution levels as the independent variables, while non-communicable diseases serve as the dependent variables. Additionally, the paper examined the year-over-year percent change of both variables to provide a more comprehensive analysis that considers that rate of change in disease and pollution metrics. Regression analysis was conducted on four combinations of these variables:

disease metric – pollution metric
disease metric rate of change – pollution metric
disease metric – pollution metric rate of change
disease metric rate of change – pollution metric rate of change

Dependent variables were viewed aggregately but also grouped by sex. A limited number of observations excluded age groups. Data for all pollution metrics (except steel exports) were obtained from the Institute of Public Health of Serbia (IOPHOS n.d.). Pollution met-

rics labeled as "total" represent the cumulative sum of the preceding metrics. However, it is not possible to calculate a "total" value for all pollutant particles (Pb, Cd, SO2, Soot, and Dust), because Pb and Cd are measured in micrograms per meter squared. SO2, Soot, and Dust are measured in micrograms per meter cubed. Steel export data was obtained from the Statistical Office of the Republic of Serbia. The dataset covers Serbia's top 50 exports from 2003–2022 (in tons) (RZS 2023). The specific export used for steel were "Flat-rolled products of iron or non-alloy steel, hot-rolled, not clad, of a width>=600mm, in coils." This steel product was selected because it was measured the most consistently. It was present in every year from 2003–2022. This paper uses steel export data as a proxy to control for potential errors in Serbian pollution data, which are known for its inaccuracies. Data relating to cancer incidence, new cancer cases, cancer deaths, and standardized cancer mortality were obtained from the Institute of Public Health of Serbia (IOPHOS n.d.). Neoplasm and respiratory data were obtained from the Statistical Office of the Republic of Serbia. Prevalence data was obtained from Reuters and Nikola Krstić (Reuters Staff 2021).

A major limitation of this analysis is inaccurate pollution data. This paper does not use measurements for PM10 particles after 2020, as the units were changed from square meters to cubic meters. Serbian pollution data also frequently contains notably low and high outlier values, which indicates potential inaccuracies.

Heavy Metal: The History of Serbia's Rockstar Refinery

Železara's legacy dates back to 1913 (Mácha n.d.). Located on the Danube, the steel mill originally produced wagons and locomotives (Mácha n.d.). It thrived in socialist Yugoslavia during the late 20th century (Mácha n.d.). However, as the 21st century dawned, Železara fell into disuse and was abandoned by the early 2000s (CBS News 2012). It experienced a revival in 2003 when U.S. Steel acquired the plant, propelling it to the status of Serbia's leading exporter in a few short years (CBS News 2012). By 2010, Železara was responsible for a tenth of Serbia's exports (CBS News 2012). However, market shocks following the 2008 financial crisis compelled U.S. Steel to exit the Serbian market, relinquishing ownership of Železara to the Serbian government in 2012. The mill was symbolically sold for a mere $1 (Mardell 2019; CBS News 2012).

From 2012–2016, Železara remained under the stewardship of the Serbian state-owned enterprise Sartid AD, with operational responsibilities contracted to the Dutch company HPK Engineering (Harper 2016). Poor management and a turbulent steel market saddled Železara with massive losses and rising debts. In 2016, Železara was privatized. HBIS Group Serbia (HBIS), a subsidiary of the state-owned Chinese firm Hesteel Group (a leading global steel producer), acquired Železara for €46 million (Global Energy Monitor 2022; Mardell 2019). The privatization garnered approval from the EU's executive body, the European Commission (EC), evoking optimism that new management would restore Železara to its former glory (Harper 2016). This optimism was further sustained by HBIS's

immediate, significant commitment of up to €300 million for infrastructure upgrades and an expansion of Železara's production capacities (Harper 2016).

Economically, operations under HBIS have been moderately successful. The privatization saved around 5,000 jobs (Telesković 2016). Although global steel market dynamics have ostensibly limited HBIS's profit growth, at least Železara is no longer hemorrhaging money (KPMG 2022; HBIS Group Serbia. n.d.; Reuters Staff 2017; Stojanovic 2012; Trading Economics n.d.). For the past six years, the Železara privatization has been hailed as a notable achievement of China's Belt and Road Initiative (BRI), and the EC's approval has been viewed as a significant milestone in Serbia's path towards EU accession. Despite this investment's apparent success, a closer examination reveals a different perspective.

Corrosive Elements

A Cause and Consequence: Transparency

The details surrounding the Železara privatization have been continuously unclear since 2016. This persistent lack of transparency is the product of synergistic failure, concerning a variety of actors at multiple levels. It is both a corrosive cause and consequence that has adversely impacted communities residing near Železara. It has effectively disrupted an accountability ecosystem by hindering access to information and excluding civil society.

At first, the Železara privatization appeared unproblematic. HBIS, the first major Chinese investor in Serbia, obtained approval for its acquisition from the EC. However, upon closer inspection, it is evident that the EC's decision-making rationale is incredibly unclear. References to the Železara privatization in EU Serbia Reports, for example, fail to provide sufficient explanation or supporting documentation (EC 2018, 29). A significant concern of the Železara privatization was whether HBIS would be obliged to reimburse state aid received by Železara from 2012–2016 and if state aid was even legal under the EU's Protocol V of the Stabilization and Association Agreement (SAA). Although the EC determined HBIS was exempt from any and all reimbursement obligations, the specific document detailing the reasoning behind this decision is not available. When the author inquired about the availability of this document, he was told by the Directorate-General for Competition (DG) that it was "not in the position to provide you with the documentation requested," with no explanation why (DG Competition International Relations Unit 2023). Additionally, following the privatization, a 2018 Commission Implementing Regulation aimed to closely monitor Železara for potential indicators of illegal state aid. However, if this monitoring took place, it has not been publicized (EC Directorate-General for Trade 2017). Thus, it is uncertain if the EC has performed its supervisory duties in connection with the Železara privatization. It appears as if the EC is hiding something. This concept will be explored in greater depth in subsequent sections.

Subsequently, it is difficult to understand how and why the EC approved the Železara privatization at the supranational level. This lack of transparency is only made more severe by the fact that independent analysis and civil society review has been continuously hampered by inaccessibility to the official terms of the Železara privatization. The contract for the Železara privatization was made public almost two years after HBIS acquired the steel mill, creating a massive time lag in the project's openness to the public gaze (Krstić 2022). Even now, the contract is extremely difficult to access. Although available online, one must manually enter the contract's link into a web browser's address bar. The most straightforward way to obtain this link is by directly contacting the Ministry of the Economy with a freedom of information request (FOI). However, these requests are not promptly addressed, with some researchers reporting delays of over a month for a response (Prelec 2023). It is worth noting that the link to the contract also appears subject to change: the author encountered a non-functional link from 2020. Nikola Krstić, a leader of the Fortress Movement (a local organization opposing HBIS's current management of Železara) questioned a need for secrecy, stating, "if this business is okay, why make it a state secret?" (Krstić 2022). The complexity and dubious nature of the contract might provide some insights.

Comprehending the extensive, 1200 page contract is a formidable task. Prelec noted that the contract is characterized by opacity and contained clauses that appear to preferentially favor HBIS while detrimentally impacting the Serbian state's finances (Vlaović 2018; Prelec 2021, 12). Such clauses included the appropriation of land for HBIS and an advantageous asset carve-out scheme that allowed HBIS to acquire Železara without assuming any of its debts (Vlaović 2018; Prelec 2021, 12). However, without robust access to the contract and guidance for understanding it, assessing accusations of preferential treatment is challenging. Furthermore, there has been little pressure from supranational oversight bodies, such as the EC, to investigate such accusations. All of these elements are problematic, reflecting an instance of second- and third-pillar capture regarding the confusing implementation of the privatization process and limited checks and balances via public scrutiny.

A lack of transparency has been both a cause and consequence of the Železara privatization. Various actors continue to limit appropriate public discourses, reflecting an instance of third-pillar capture. On a localized level, civil society has been largely excluded from discussions regarding Železara. This could be none the truer for Fortress Movement, a crucial civil society actor that has been vocal about Železara-specific issues such as transparency, environmental damage, and potential labor exploitation. Despite gaining international recognition and media coverage, Fortress has only recently become involved in official discussions about Železara (Krstić 2022). However, even now, Fortress still is limited in its ability to voice its concerns (Krstić 2022). For example, Fortress was invited by local Smederevo officeholders to contribute to the development of a strategic document outlining the ten-year plan for the city's progress (Krstić 2022). Fortress's leader, Nikola Krstić, perceives his organization's inclusion in the Smederevo strategic document as an empty gesture (Krstić 2022). Minimal collaboration between Fortress and Smederevo's

local government has occurred thus far (Krstić 2022). Subsequently, without much space for discourse, many of Fortress's claims and concerns are inherently reduced to speculative accusations.

In a broader scope, current and timely information regarding Železara and its operations has been consistently lacking. Although HBIS claims it has invested over €300 million in upgrading Železara, the firm has not provided any official documentation supporting its claims, despite requests from Krstić and others (HBIS 2021). Thus, it is impossible to accurately assess the value and effectiveness of these capital increases. Moreover, information regarding the presence of foreign laborers in Železara remains scarce. Allegedly, HBIS imported over 1,000 migrant workers from China (HBIS 2021). However, little was known about them. The workers resided in a gated camp (Pokret Tvrđava n.d.). They had minimal interactions with their Serbian co-workers, rarely ventured into town, and were largely invisible to the local community (Krstić 2022). The lack of transparency surrounding their presence raises concerns about potential human trafficking and labor exploitation. However, with little information available, these claims cannot be substantiated.

The issue of transparency exhibits a high level of corrosiveness. Its multi-level nature encompassing local, national, and international spheres makes it particularly problematic. At the local and national levels, there has been a failure by the Serbian government and HBIS to effectively engage with civil society and provide relevant information. The Železara privatization contract remains excessively challenging to access and comprehend. Constructive assessments by civil society have been repeatedly hampered, as demonstrated by the mere inclusion of Fortress in Smederevo's strategic plan and the lack of information from HBIS. These elements enable the third-pillar of capture. On an international scale, the EC's lack of transparency is particularly notable, given its endorsement of the privatization and its international reputation as a good governance watchdog. While misconduct from the Serbian government and Chinese state-owned enterprise might be anticipated, any sort of EC complacency in upholding its own standards is particularly damaging. The EC's role in enabling the Železara privatization will be further explored in the following section.

The Rule of Law, Conflicts of Interest, and Malign Foreign Influence

The Železara privatization has been portrayed as a significant milestone in the negotiations for Chapter 8 of Serbia's a*cquis communautaire*, but this narrative should be further scrutinized. The EC appears to have adapted its own standards to cover-up illegal elements of the privatization.

The EC failed to effectively perform its relevant duties concerning the permissibility of state aid to Železara. As the Železara privatization was occurring in 2016, the EC was still uncertain about the legality of previous state aid provided to Železara, nearly two years after the 2014 SAA deadline for aligning existing aid schemes. Thus, the EC not only failed

to meet its SAA benchmark in a timely manner, but also created a conflict of interest for itself. The Železara privatization did not seem to wait for the EC's sloth decision-making. HBIS subsequently acquired Železara assuming that the previous state aid received by the steel mill was legal and that any debts incurred as a result of that state aid would be forgiven. This likely altered the EC's decision-making calculus regarding state aid. Following the privatization, the EC had to consider that an unfavorable ruling would derail a significant, highly-publicized, and politically important investment in Serbia. The EC had a very positive incentive to avoid becoming a "villain," especially in Serbia, where positive perceptions of the EU generally have been steadily declining (BCBP 2021). Thus, following an investigation conducted in November 2017 (after the Železara privatization had occurred), the EC concluded HBIS was not required to reimburse any sort of state aid (Gecić 2016). Despite a positive outcome, it appears the EC conducted a hasty investigation to keep pace with the Železara privatization and preserve its own image.

This is supported by the fact that the official quantity of state aid provided to Železara was not fully identified until 2021, when Serbia's Commission for State Aid Control (CSAC) closed its bankruptcy case on Železara (EC 2021). CSAC's decision identified that past-state aid was "illegal and incompatible with state aid principle and regulations" (DG Competition International Relations Unit 2023). CSAC actually ordered Serbia "to recover the aid granted, including interest" (DG Competition International Relations Unit 2023). In light of CSAC's decision, it is evident that the EC's investigation was conducted without full knowledge of the quantity and legality of state aid provided to Železara. Thus, while the EC approved a project that indeed violated the SAA, it intentionally did not draw attention to such a grave error.

However, the EC whitewashed its failure, framing it as a success that directly impacted Serbia's EU accession process. The DG noted that in consultation with other "Commission Services," it was agreed that the CSAC decision "had addressed the issue of illegal aid within the context of Serbia's legal framework… therefore, it was agreed that the (Chapter 8) benchmark was met" (DG Competition International Relations Unit 2023). Ironically, the Chapter 8 benchmark was met because CSAC rightly scrutinized an acquisition that the EC carelessly approved. Thus, it seems as if the CSAC investigation was orchestrated to correct a massive EC oversight. In this way, the EC performed an act of first- and second-pillar capture, modifying the "rules" of accession for its own benefit. Rather than addressing its own malfeasance, the EC used the results of the investigation to reward itself and Serbia. It branded a major blunder as a correctable mistake, and then used it as an opening benchmark in Serbia's accession process. This observation suggests the EC engaged in a form of supranational capture by bending the standards of its own SAA and subsequent *acquis communautaire*. In this instance, the object of capture is not the state, but Serbia's EU accession process.

It is also important to note that the official document detailing the outcome and decision-making rationale of the EC's investigation is intentionally not available to the public, as this author's correspondence with the DG indicates. The EC's disruption of the public

gaze subsequently exemplifies another case of third-pillar capture. Moreover, it raises further questions about the validity of the investigation, implying that its reasoning would not stand against potential public scrutiny. This seems especially likely in light of the fact that previous and concurrent assessments of state aid to the Serbian steel industry have also been privy to faulty and confusing logic.

Such logic was criticized in 2015, when the EC was chastised for using "creative math" to exempt Železara from state aid violations (EC Directorate-General for Trade 2017, 29). A more notable instance of malfeasance, however, concerns a 2017 anti-dumping case that involved Serbia and other steel exporting countries (Gecić 2016). The EC concluded that Serbia was exempt from SAA violations of price fixing, but there are doubts to be raised about this decision. The EC's assessment relied on quantitative analysis to determine whether Železara had the ability to set prices in the steel market. Since there was insufficient evidence to suggest that Železara acted as a price setter, the EC concluded violations of the SAA were not applicable (EC Directorate-General for Trade 2017, 29). However, this decision leaves room for dispute.

The EC's judgment focused more on the consequences rather than the intent of Železara's actions. The EC exempted Serbia from official investigation because it used export data to determine that Serbia's share in the steel market was "negligible" (EC Directorate-General for Trade 2017, 29). However, this quantitative analysis neglected to consider whether the state aid provided to Železara was intended to facilitate the undercutting of international competitors. Understanding motive is critical in the context of corrosive capital and state capture, largely because malintent drives various corrosive practices. The European Steel Association (EUROFER) also criticized the EC's methods of investigation. EUROFER claimed that the EC investigation failed to include information regarding injury and undercutting margins for Serbia, even though the investigation's hearing officer advocated for the inclusion of such information, which is often used in anti-dumping cases (EC Directorate-General for Trade 2017, 29). In this instance, it would have contributed to a better understanding of Serbia's compliance with the EC's anti-dumping standards outlined in its Basic Regulation (EC Directorate-General for Trade 2017, 29).

It is important to note that the EC itself also recognized that its decision was tenuous and contestable. The EC stressed that Železara should be continuously monitored, and that their decision should not discourage potential, future investigations. The implementation of an admittedly weak and faulty investigation decision is suggestive of second-pillar capture and optically damaging to the EC's credibility (and the EU's credibility at-large). Although claims of state aid might seem initially disputable because of an apparent lack of strong, surface-level evidence, an in-depth analysis reveals that the EC's decision regarding Železara's state aid has been historically contentious and subject to dispute.

The EC inadequately performed its function as an overseer through its opaque state-aid investigation and subsequent cover-up. The EC's use of a CSAC decision to retroactively validate the Železara privatization and use it as an opening benchmark is particularly

problematic. It enabled an illegal privatization, reflecting instances of first- and second-pillar capture. Furthermore, the EC's actions reflect that state capture can go beyond the state. In affecting not only the Železara privatization but also Serbia's EU accession process, the EC demonstrated that capture can also be supranational.

A Consequence for Concern: Pollution

Of the various consequences available for investigation, pollution is the most prevalent. Its existence is attributable to the corrosive processes that enabled the Železara privatization and portrayed it as a benchmark success. The impact of Železara's pollution on surrounding villages (most notably Radinac) is a significant concern. The phenomenon of "red rain" and the subsequent occurrence of "black rain" experienced by the residents of Radinac is a prime example.

Red and black rain are a steel dust emitted by Železara, which settles on everything in Radinac (Đorđević 2020). They are a visible manifestation of the pollution generated by the steel mill (Đorđević 2020). The designation of Radinac as one of the most polluted places in Serbia (since the commencement of consistent pollution monitoring in 2018) underscores the severity of the pollution problem (Đorđević 2020). In 2021, Radinac exceeded acceptable limits for air pollution for 148 days (HBIS 2021). Red and black rain contain hazardous PM10 and PM 2.5 particles, and prolonged exposure to them can cause various health complications, including asthma, heart failure, cancer, and lung disease (Đorđević 2020). A more recent dust analysis carried out in Radinac revealed elevated levels of toxic elements, including arsenic, cadmium, nickel, lead, and cobalt (Krstić 2022).

Železara's pollution has had a profound and tangible impact on the daily lives of the residents in Radinac and neighboring communities. The severity of the pollution has even led Radinac and two other villages to file a criminal appeal against HBIS (Just Finance 2021). It appears the severity of red and black rain is specific to HBIS (Prelec 2021, 12). According to local resident, Zoran Stojanović, red rain was not so much of an issue when "the Americans were here" (Stojanović 2023). Furthermore, Prelec notes that black rain is a relatively recent phenomenon. First occurring in 2020, black rain is believed to be caused by smelting a lower-quality iron ore imported from Brazil (Reuters Staff 2020).

Many believe pollution is linked to an increase in non-communicable diseases in Smederevo municipality. Krstić claims that according to official data, the prevalence of cancer in Smederevo has quadrupled between 2011–2019, despite a decrease in the city's population (Reuters Staff 2021). Analysis of available data reflects cancer incidence has exhibited an average annual increase of about 6% since 2003 (IOPHOS 2007; IOPHOS 2008; IOPHOS 2018; IOPHOS 2020). While highest incidence rates were recorded in 2007, the second highest incidence value occurred in 2019, with projected trajectories suggesting incidence might have reached an all-time high in Smederevo in recent years (IOPHOS

2007; IOPHOS 2008; IOPHOS 2018; IOPHOS 2020). These calculations are derived from the author's analysis and the Health Statistical Yearbook of Serbia.

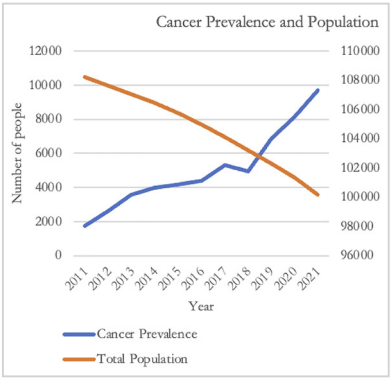

Figure 1: *Cancer Prevalence*

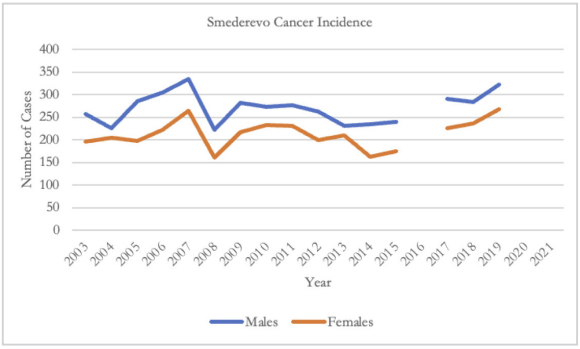

Figure 2: *Smederevo Cancer Incidence*

Contrary to the evidence presented above, HBIS maintains they have made significant strides in reducing their ecological footprint. They also note that air quality issues in Smederevo are likely attributable to other factors, such as the burning rubber, wood, and oil by locals (HBIS 2021). HBIS emphasizes its substantial investments (nearly €300 million) in various environmental projects (HBIS 2021). Comparatively, US Steel's investments were reportedly only $80 million (HBIS 2021). HBIS argues that they have reduced air pollution in Radinac, because 2020 levels were far lower than those in 2010 and 2011 (HBIS 2021). HBIS also claims the concentration of PM10 and PM2.5 particles has been declining since 2019, citing measurements from their own pollution monitoring efforts (HBIS 2021). However, it is worth noting that HBIS's data is not publicly available.

However, HBIS has largely failed to address the claim that their operations might be adversely impacting public health in Serbia. Regressions performed using Serbian pollution data and health statistics are largely inconclusive, with an even split of statistically significant positive and negative correlations. Some significant results appear to be largely influenced by outlier values.

However, regressions performed using steel export values and various cancer metrics offer some interesting insights, demonstrating multiple positive correlations (bolded in Table 3). The association between steel exports and various cancer metrics is not uniform across different time periods. While a positive relationship between exports and cancer existed even during the years when US Steel operated Železara, it appears that this association was relatively weaker compared to more recent years. This is evident from the presence of both the highest and lowest outlier values during the US Steel years, particularly in the regressions examining cancer incidence.

Disease Metric	Pollution Metric	P-value	Correlation
Cancer Prevalence Rate Annual Change	Cd PM10 Annual Change	0.02554	-0.7696018
Cancer Prevalence	Cd PM10	0.02876	-0.7596379
Cancer Prevalence Rate	Cd PM10	0.03307	-0.7473264
Respiratory Mortality Total Rate Annual Change	Cd PM10	0.00292	-0.9999895
Respiratory Mortality Female Rate Annual Change	Cd PM10	0.01259	-0.9998046
Cancer Incidence Total Annual Change	Dust	0.0144	-0.65845
Cancer Incidence Male Growth Annual Change	Dust	0.02128	-0.6289911
Cancer Incidence Female Growth Annual Change	Dust	0.03173	-0.595588
Cancer Incidence Total Growth Annual Change	Dust Annual Change	0.003788	-0.7644204
Cancer Incidence Total Growth Male Annual Change	Dust Annual Change	0.002716	-0.7808922
Cancer Incidence Total Growth Annual Change	Dust Annual Change	0.013	-0.6900784
New Cancer Cases Total Annual Change	Dust Annual Change	0.05069	-0.5745759
New Cancer Cases Male Annual change	Dust Annual Change	0.02872	-0.6281407
Cancer Prevalence Rate	Export	0.03615	0.6989858
Cancer Prevalence	Exports	0.0429	0.6822655
Cancer Incidence Total	Exports	0.02231	0.6252033
Cancer Incidence Male	Exports	0.02104	0.6298917
Cancer Incidence Female	Exports	0.03589	0.5845549
New Cancer Cases Total	Exports	0.01139	0.6748431
New Cancer Cases Males	Exports	0.006619	0.7093564
Neoplasm Mortality Total	Exports	0.01084	0.8702787
Neoplasm Mortality Total Annual Change	Exports	0.003191	0.9213678
Respiratory Mortality Male	Exports	0.0346	-0.7898562
New Cancer Cases Females	Exports	0.03117	0.5971485
Neoplasm Mortality Rate Total Annual Change	Exports Annual Change	0.03362	0.846306
Standard Cancer Mortality Rates Total	Max S02 Annual Change	2.40E-06	-0.9493839
Standard Cancer Mortality Rates Total Annual Change	Max S02 Annual Change	0.0007386	-0.8343459
Standard Cancer Mortality Rates Male	Max S02 Annual Change	7.99E-05	-0.896094
Standard Cancer Mortality Rates Male Annual Change	Max S02 Annual Change	0.007467	-0.7263506

Disease Metric	Pollution Metric	P-value	Correlation
Cancer Deaths Total	Max Soot	0.004364	-0.733012
Cancer Deaths Female	Max Soot	0.03171	-0.5956492
Standard Cancer Mortality Rates Total	Max Soot Annual Change	1.50E-05	-0.9264673
Standard Cancer Mortality Rates Total Annual Change	Max Soot Annual Change	7.66E-05	-0.8970182
Standard Cancer Mortality Rates Male	Max Soot Annual Change	7.45E-05	-0.9006079
Standard Cancer Mortality Rates Male Annual Change	Max Soot Annual Change	0.002094	-0.7929153
Cancer Deaths Male	Max Soot Annual Change	0.6511908	0.02181
Cancer Deaths Total	Max Total	0.0007377	-0.8124828
Cancer Deaths Female	Max Total	0.006987	-0.7061111
Cancer Deaths Male	Max Total Annual Change	0.05859	0.5594377
Standard Cancer Mortality Rates Total	Max Total Annual Change	7.98E-07	-0.959539
Standard Cancer Mortality Rates Total Annual Change	Max Total Annual Change	7.78E-05	-0.8966685
Standard Cancer Mortality Rates Male	Max Total Annual Change	3.66E-05	-0.9116175
Standard Cancer Mortality Rates Male Annual Change	Max Total Annual Change	0.003279	-0.7717243
Cancer Deaths Female	Max Total Annual Change	0.04542	-0.585625
Cancer Prevalence Rate Annual Change	S02	0.02761	-0.7631126
New Cancer Cases Females	S02 Annual Change	0.02717	-0.6089881
Cancer Prevalence Rate Annual Change	Soot	0.04299	0.7223293
Cancer Incidence Total	Soot Annual Change	0.01426	0.6591775
Cancer Incidence Male	Soot Annual Change	0.006234	0.7128956
Cancer Incidence Female	Soot Annual Change	0.04379	0.5659317
New Cancer Cases Total	Soot Annual Change	0.0188	0.6386617
New Cancer Cases Males	Soot Annual Change	0.009346	0.687936
New Cancer Cases Females	Soot Annual Change	0.05293	0.5472114
Cancer Prevalence	Water Quality	0.05742	0.6512714
Cancer Prevalence Rate	Water Quality	0.05436	0.6573367
Neoplasm Mortality Female Annual Change	Water Quality	0.04554	0.8203004

Table 3: *P Values and Correlation Values*

Since 2016, there seems to be a more consistent and noticeable relationship between export levels and disease incidence. This is particularly evident when considering the close clustering of data points for the post-2016 period. Although an independent analysis spe-

cifically focusing on the years 2016–2023 would be beneficial, the limited number of observations within this time frame hinders its accuracy.

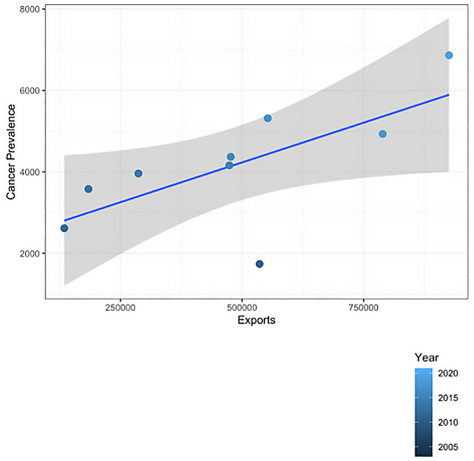

Figure 3: *Correlation between Exports and Cancer Prevalence*

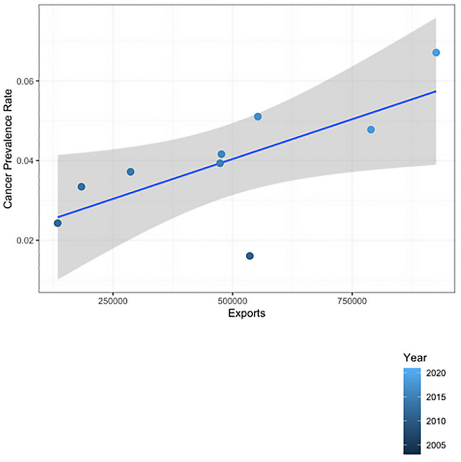

Figure 4: *Correlation between Exports and Cancer Prevalence Rate*

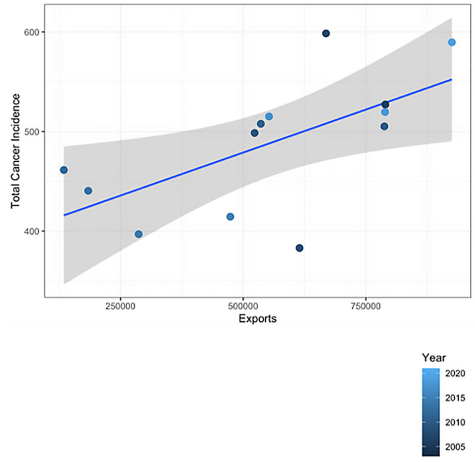

Figure 5: *Correlation between Exports and Cancer Incidence*

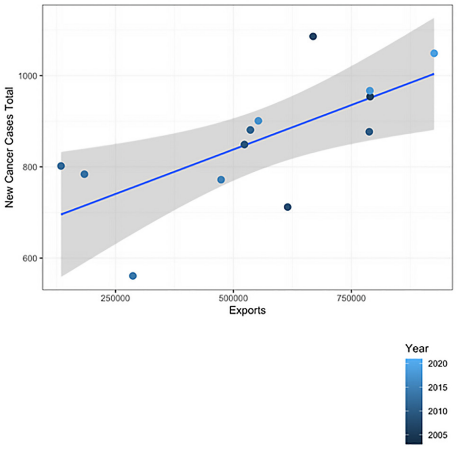

Figure 6: *Correlation between New Cancer Cases Total*

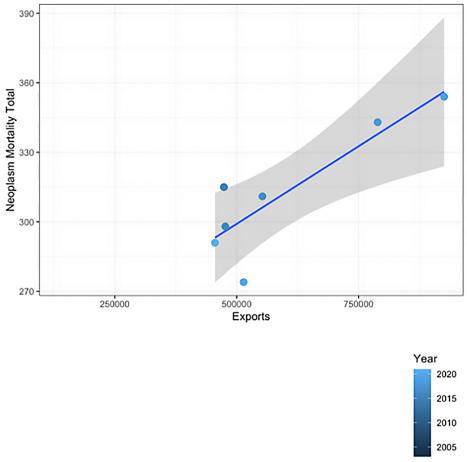

Figure 7: *Correlation between Exports and Total Neoplasm Mortality*

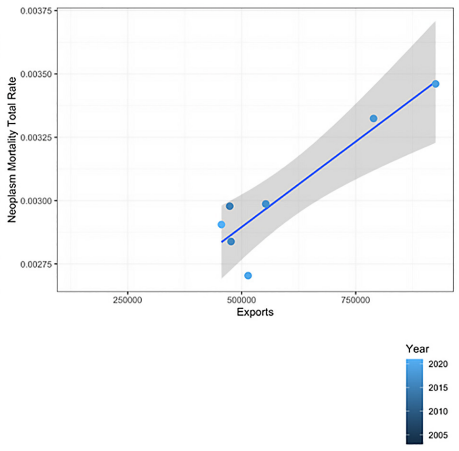

Figure 8: *Correlation between Exports and Neoplasm Mortality Rate*

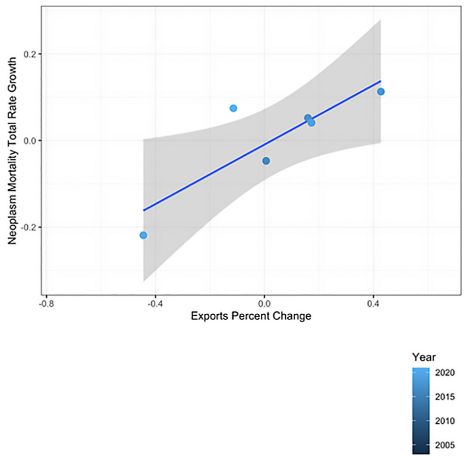

Figure 9: *Correlation between Exports and Neoplasm Mortality Rate Growth*

This paper's results corroborate what can be gleaned simply from talking a walk in a village such as Radinac. Given the severe physical and health costs of pollution, its continuous presence is confusing: the issue should be addressed. The steel mill's mediocre economic performance is certainly not outweighing the severity of red and black rain (HBIS Group Serbia n.d.). Something else appears to be at play.

Serbia and the EC have not been vocal enough in addressing the pollution tangibly impacting the quality of life in the communities near Železara. On a national level, Serbian pollution data remains rife with methodological inconsistencies, making adequate assessment difficult. Policing attempts by relevant agencies appear to be nonexistent. For example, HBIS engaged in a meeting with Fortress at the Serbian Environmental Protection Agency (SEPA), promising to improve its commitment to monitoring and mitigating air pollution (Krstić 2022). According to Krstić, not much materialized as an effect of this meeting, on both local and national levels. Krstić notes that such "olive branch" overtures are disingenuous attempts to appease concerned citizens (Krstić 2022). Promises for collaborative pollution reduction appear hollow, particularly for those residing in communities near Železara, who struggle daily with iron-laden air and plumes of red dust.

The EC has also remained surprisingly silent. While both the 2020 and 2021 Serbia Reports note that Smederevo has some of the poorest air quality in Serbia, not a single Serbia Report since 2016 has given attention to the issue of Železara's pollution (EC 2021, 114; EC 2020, 106; EC 2019; EC 2018; EC 2017; EC 2016). Certainly, there exists an apathy towards Železara's pollution, but why? Perhaps because calling attention to a massive public health concern would blemish the official praise given to Železara as an accession benchmark for Serbia. In this way, ignoring pollution appears to be a consequence of earlier image-building tactics.

Železara's environmental impact is highly corrosive. Anecdote and statistical analysis provide strong evidence for this assertion, demonstrating a massive cost to the communities surrounding Železara. Serbia and the EC have barely given any attention to the issue of Železara's pollution. This silence is convenient for preserving the positive, official narrative surrounding the project, representing an elite gain at the public's expense.

Conclusion

This paper intended to more deeply explore the meaning of corrosive capital and determine its root causes, in order to better understand a rather vague and complex topic in international political economy. In doing so, this paper suggests that the Železara privatization supports the Mutual Enthusiasm Hypothesis, showcasing the important roles of domestic governments, state-led corporations, and supranational institutions in facilitating corrosive projects. There are myriad instances of capture occurring across all different pillars and concerning various corrosive causes and consequences. Thus, part of this paper's findings aligns with existing approaches to corrosive capital and state capture, reflecting that cooperative efforts between investors and hosts are important causal factors.

It is important to note that the EU (through the EC) has also played a critical role as a kind of enabler in the Železara privatization. The EC used questionable methods in its approval of the Železara privatization, and it appears it has not monitored the steel mill as closely as it promised. The EC's role in the Železara privatization is a particularly impor-

tant academic finding because it also dispels ideological approaches to corrosive capital. The aforementioned traditional approach to corrosive capital mentioned in this paper's literature review would stipulate the EC would strongly act to stymie the Železara privatization, because of China's role as the acquirer. However, the EC's motives here seem more pragmatic. The EC's decision (even if it was a conflict of interest) appears to have been made in the context of cost-benefit analysis, where producing unfavorable investigative results to thwart the Železara privatization could have induced a firestorm of backlash. Moreover, the EC used Železara privatization to its own advantage by using a CSAC decision to cover for its own blunders and make Železara an opening benchmark in Serbia's *acquis communautaire*. This strategic decision positively portrayed the project as a critical moment for Serbia's EU integration, with the likely intent of presumably bolstering its own reputation. This finding suggests that capture can be supranational, extending beyond the mere unit of the state.

However, the role of the EC does not exempt the Serbian state nor HBIS for their lack of transparency and contributions to heavy pollution. Železara is the product of a synergy of failures. The multi-level schematics and synergy of failures that enabled the Železara project have created a variety of spillover-effects including civil society exclusion and pollution. The ultimate victims are Serbians, specifically those who live in Smederevo and villages near Železara. This finding presents an important need for mapping and connecting spill-over effects of foreign investments in future research to better understand which corrosive causes might have the most severe consequences.

This paper raises some new questions for future studies. Completely understanding the linkages between corrosive enablers will require analysis of a diverse portfolio of projects. Železara is specific to a certain country, sector, deal-type, and actors. Using this paper's framework, it would be interesting to explore how investments in different countries and industries might be subject to different corrosive conditions. Perhaps investments could be enabled by only one actor, or more than three. Perhaps greenfield and brownfield investments might be more vulnerable to corrosiveness than M&A investments. More research is necessary.

In sum, however, the Železara privatization is a prime example of corrosive capital. It has served to strengthen the images of various actors at the public's expense.

References

Belgrade Center for Security Policy. 2021. "Public Perceptions towards Regional Cooperation and EU Integration." Belgrade: BCBP, March 25. Accessed November 28, 2022. https://bezbednost.org/en/publication/public-perceptions-towards-regional-cooperation-and-eu-integration/.

Capoccia, Giovanni, and R. Daniel Kelemen. 2007. "The Study of Critical Junctures: Theory, Narrative, and Counterfactuals in Historical Institutionalism." *World Politics* 59 (3): 341–69. http://muse.jhu.edu/article/222749.

Capussela, Andrea Lorenzo. 2021. "State Capture and Collective Action." *Journal of Regional Security* 16 (2): 127–50. https://doi.org/10.5937/jrs0-34271.

CBS News. 2012. "Serbia Buys U.S. Steel Plant; Price: $1." *CBS News*, January 31, 2012. Accessed April 10, 2023. https://www.cbsnews.com/news/serbia-buys-us-steel-plant-price-1/.

Corrosive & Constructive Capital Initiative. n.d. "Corrosive & Constructive Capital Initiative." Accessed December 19, 2022. https://corrosiveconstructivecapital.cipe.org/.

CSD. 2018. "Policy Brief No. 72: Assessing Russia's Economic Footprint in Serbia." January 29. Sofia: CSD. Accessed November 2, 2022. https://csd.bg/publications/publication/policy-brief-no-72-assessing-russias-economic-footprint-in-serbia/.

David-Barrett, Elizabeth. 2021. "State Capture and Inequality." New York: NYU Center on International Cooperation.

David-Barrett, Elizabeth. 2023. "State Capture and Development: A Conceptual Framework." *Journal of International Relations and Development* 26 (2): 224–44. https://doi.org/10.1057 /s41268-023-00290-6.

DG Competition International Relations Unit. 2023. "Re: Question Regarding Serbia and Smederevo Steelworks (Reade Ben, Fulbright Scholar, Princeton University)," May 25, 2023.

Dimitrov, Ivo. 2018. "Russian Economic Footprint in the Western Balkans. Corruption and State Capture Risks." SELDI, January 30, 2018. https://seldi.net/publications/reports/russian-economic-footprint-in-the-western-balkans-corruption-and-state-capture-risks/.

Đorđević, Dina. 2020. "Air Pollution Higher Than Shown by Official Data." *Center for Investigative Journalism of Serbia*, July 23. Accessed February 22, 2023. https://www.cins.rs/en/air-pollution-higher-than-shown-by-official-data/.

EC. 2016. "Serbia Report 2016." Strasbourg, France: EC, November 9. Accessed May 1, 2023. https://neighbourhood- enlargement.ec.europa.eu/serbia-report-2016_en.

EC. 2018. "Serbia Report 2018." Strasbourg, France: EC, April 27. Accessed April 30, 2023. https://neighbourhood-enlargement.ec.europa.eu/serbia-report-2018_en.

EC. 2019. "Serbia Report 2019." Strasbourg, France: EC, May 29. Accessed April 30, 2023. https://neighbourhood-enlargement.ec.europa.eu/serbia-report-2019_en.

EC. 2020."Serbia Report 2020." Strasbourg, France: EC. October 26. Accessed November 28, 2022. https://neighbourhood-enlargement.ec.europa.eu/serbia-report-2020_en.

EC. 2021. "Serbia Report 2021." Strasbourg, France: EC, October 19. Accessed November 24, 2022. https://neighbourhood-enlargement.ec.europa.eu/serbia-report-2021_en.

EC. 2022. "Serbia Report 2022." Strasbourg, France: EC. October 12. Accessed November 28, 2022. https://neighbourhood-enlargement.ec.europa.eu/serbia-report-2022_en.

EC Directorate-General for Trade. 2017. "Commission Implementing Regulation (Eu) 2017/1795 of 5 October 2017 Imposing a Definitive Anti-Dumping Duty on Imports of Certain Hot-Rolled Flat Products of Iron, Non-Alloy or Other Alloy Steel Originating in Brazil, Iran, Russia and Ukraine and Terminating the Investigation on Imports of Certain Hot-Rolled Flat Products of Iron, Non-Alloy or Other Alloy Steel Originating in Serbia." EC, October 5. Accessed May 13, 2023. https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:32017R1795.

Gecić, Bogdan. 2016. "Gecić Law Advises on €46 Million Asset Sale of Železara." Gecić Law, May 11. Accessed April 10, 2023 https://geciclaw.com/zelezara-smederevo/.

Global Energy Monitor. 2022. "HBIS Group." Global Energy Monitor, August 16. Accessed May 7, 2023. https://www.gem.wiki/Main_Page.

Haroon Bhorat, Mbongiseni Buthelezi, Ivor Chipkin, Sikhulekile Duma, Lumkile Mondi, Camaren Peter, Mzukisi Qobo, Mark Swilling, and Hannah Freidenstein. 2017. "Betrayal of the Promise: How South Africa Is Being Stolen." May 2017. Accessed November 21, 2023. https://pari.org.za/wp-content/uploads/2017/05/Betrayal-of-the-Promise-25052017.pdf.

Harper, Jo. 2016. "Chinese Company HBIS Agrees to Buy Serbian Steel Mill Železara Smederevo for EUR 46 Million." *Obserwator Finansowy*, May 7. Accessed April 15, 2023. https://www.obserwatorfinansowy.pl/in-english/chinese-company-hbis-agrees-to-buy-serbian-steel-mill-zelezara-smederevo-for-eur-46-million/.

HBIS. 2021. "Interest Is the Improvement of Environmental Impact." HBIS Group Serbia, November 9. Accessed April 17, 2023. https://hbisserbia.rs/interest-is-the-improvement-of-environmental-impact/.

HBIS Group Serbia. n.d. "Bilans Uspeha 2020." APR. Accessed June 2, 2023. https://pretraga3.apr.gov.rs/pretragaObveznikaFI.

Hellman, Joel, and Daniel Kaufmann. 2001. "Confronting the Challenge of State Capture in Transition Economies." International Monetary Fund, September 2001. Accessed May 16, 2023. https://www.imf.org/external/pubs/ft/fandd/2001/09/hellman.htm.

IOPHOS. n.d. "Health Statistical Yearbook of Republic of Serbia." IOPHOS. Accessed May 26, 2023. https://www.batut.org.rs/index.php?lang=2.

IOPHOS. 2007. "Health Statistical Yearbook of Republic of Serbia 2007." Accessed May 6, 2023. https://www.batut.org.rs/index.php?content=279.

IOPHOS. 2008. "Health Statistical Yearbook of Republic of Serbia 2008." Accessed May 6, 2023. https://www.batut.org.rs/index.php?content=279.

IOPHOS. 2018. "Health Statistical Yearbook of Republic of Serbia 2018." Accessed May 6, 2023. https://www.batut.org.rs/index.php?content=279.

IOPHOS. 2020. "Health Statistical Yearbook of Republic of Serbia 2020." Accessed May 6, 2023. https://www.batut.org.rs/index.php?content=279.

Just Finance. 2021. "Chinese Companies in Serbia - Disgraced in International Operations." Just Finance International, April 29. Accessed May 2, 2023. https://justfinanceinternational.org/2021/04/29/chinese-companies-in-serbia-disgraced-in-international-operations/.

KPMG. 2022. "Serbian Tax Card 2022." https://assets.kpmg.com/content/dam/kpmg/rs/pdf/2022/05/SRB-Tax-Card-Eng-online-2022.pdf.

Krstić, Nikola. 2022. Fortress Movement. In person interview.

Mácha, Viktor. n.d. "HeSteel Serbia, Smederevo." Viktor Mácha. Accessed April 15, 2023. https://www.viktormacha.com/galerie/hesteel-serbia-smederevo-339/.

Mardell, Jacob. 2019. "Filling a Vacuum." *Berlin Policy Journal - Blog* (blog), May 16. Accessed May 1, 2023. https://berlinpolicyjournal.com/filling-a-vacuum/.

Marjanović Rudan, Ana. 2021. "Whitewashing State Capture - Discursive Practices in the Western Balkans." *Journal of Regional Security* 16 (2): 183–214. https://doi.org/10.5937/jrs0-33736.

Marusic, Damir. 2021. "Corrosive Capital in the Western Balkans: An Analysis of Four High Impact Chinese Investments." CIPE, May 17. https://www.cipe.org/resources/corrosive-capital-in-the-western-balkans-an-analysis-of-four-high-impact-chinese-investments/.

Mirel, Pierre. 2019. "Union Européenne-Balkans Occidentaux : Pour Un Cadre de Négociations d'adhésion Rénové." Robert Schuman Foundation, September 30. Accessed May 16, 2023. https://www.robert-schuman.eu/fr/questions-d-europe/0529-union-europeenne-balkans-occidentaux-pour-un-cadre-de-negociations-d-adhesion-renove.

Mosley, Layna. 2013. Interview Research in Political Science. Ithaca, United States: Cornell University Press. http://ebookcentral.proquest.com/lib/princeton/detail.action?docID=3138479.

Nugent, Neill. 2017. "The Government and Politics of the European Union." Macmillan International Higher Education, 1989. https://www.macmillanihe.com/page/detail/The-Government-and-Politics-of-the-European-Union/?K=9781137454089.

Pavlović, Dušan. 2021. "State Capture in the Post-Communist Southeast Europe. A New Variant?" *Academia Letters*, August 20. https://doi.org/10.20935/AL3032.

Pejič, Nina. 2021. "Many a Mickle Makes a Muckle: Chinese Corrosive Capital in Croatia." Bratislava: CEIAS. https://ceias.eu/wp-content/uploads/2021/08/Many-a-Mickle.pdf.

Petrović, Predrag. 2021. "State Capture and Security Intelligence Agencies in Serbia." *Journal of Regional Security* 16 (2): 151–82. https://doi.org/10.5937/jrs0-29333.

Phillips, Rebecca Dobson, Elizabeth Dávid-Barrett, and Robert Barrington. 2021. "Defining Corruption in Context." Centre for the Study of Corruption, University of Sussex, December.

Pokret Tvrđava. n.d. "Pokret Tvrđava." *Facebook*. https://www.facebook.com/pokrettvrdjava/.

Pouliot, Vincent, and Jérémie Cornut. 2015. "Practice Theory and the Study of Diplomacy: A Research Agenda." *Cooperation and Conflict* 50 (3): 297–315.

Prelec, Tena. 2020. "The Vicious Circle of Corrosive Capital, Authoritarian Tendencies and State Capture in the Western Balkans." *Journal of Regional Security* 15 (2): 167–98. https://doi.org/10.5937/jrs15-25716.

Prelec, Tena. 2021. "Eco-Monsters & Eco-Fighters: China's Investments in Serbia's Heavy Manufacturing Industry as Seen through an Environmental Lens." Prague Security Studies Institute, January 26. https://www.pssi.cz/publications/39-eco-monsters-eco-fighters-china-s-investments-in-serbia-s-heavy-manufacturing-industry-as-seen-through-an-environmental-lens.

Prelec, Tena. 2023. "Fwd: Fw: Захтев За Приступ Информацијама Од Јавног Значаја," April 12.

Reuters Staff. 2017. "Serbia's Smederevo Steel Mill Boosts Revenue." *Reuters*, December 18. Accessed May 1, 2023. https://www.reuters.com/article/smederevo-outlook/serbias-smederevo-steel-mill-boosts-revenue-statement-idINL8N1OI237.

Reuters Staff. 2020. "Chinese Steelmaker HBIS in Yuan-Denominated Iron Ore Deal with Brazil's Vale." *Reuters*, January 22, sec. Financials. Accessed May 1, 2023. https://www.reuters.com/article/china-ironore-hbis-idUKL4N29R3U9.

Reuters Staff. 2021. "Chinese-Owned Steel Mill Coats Serbian Town in Red Dust; Cancer Spreads | Reuters." *Reuters*, November 9. Accessed May 2, 2023. https://www.reuters.com/world/europe/chinese-owned-steel-mill-coats-serbian-town-red-dust-cancer-spreads-2021-11-09/.

RZS. 2023. "External Trade." Accessed May 3, 2023. https://www.stat.gov.rs/en-us/oblasti/spoljna-trgovina/.

Saito-Jensen, Moeko. 2015. "Multilevel Governance Theory." Theories and Methods for the Study of Multilevel Environmental Governance. Center for International Forestry Research. https://www.jstor.org/stable/resrep02152.5.

Stojanovic, Dusan. 2012. "Serbia To Buy Loss-Making U.S. Steel Plant." *Associated Press*, January 30. https://www.manufacturing.net/home/news/13205863/serbia-to-buy-lossmaking-us-steel-plant.

Stojanović, Zoran. 2023. "Viber Correspondence."

Stojanović-Gajić, Sonja, and Dušan Pavlović. 2021. "State Capture, Hybrid Regimes, and Security Sector Reform." *Journal of Regional Security* 16 (2): 89–126. https://doi.org/10.5937/jrs0-34622.

Stoyanov, Alexander, and Alexander Gerganov. 2019. "State Capture: From Theory to Piloting a Measurement Methodology." *Godishnik na UNSS*, University of National and World Economy, Sofia, Bulgaria, 1: 19–46.

Telesković, Anica. "Kinezima imovina, a Srbiji dugovi železare." *Politika Online*, April 22, 2016. Accessed May 1, 2023. https://www.politika.rs/sr/clanak/353643/Ekonomija/Kinezima-imovina-a-Srbiji-dugovi-zelezare.

Trading Economics. n.d. "HRC Steel." Trading Economics. Accessed May 1, 2023. https://tradingeconomics.com/commodity/hrc-steel.

Tsimonis, Konstantinos, Igor Rogelja, Ioana Ciută, Anastasia Frantzeskaki, Elena Nikolovska, and Besjan Pesha. 2019. "A Synergy of Failures: Environmental Protection and Chinese Capital in Southeast Europe." *Journal of Current Chinese Affairs* 48 (2): 171–200. https://doi.org /10.1177/1868102620919861.

Vlaović, G. 2018. "Država Subvencioniše Hestil Kršeći Pravila Evropske Unije." *Danas*, August 20. Accessed April 20, 2023. https://www.danas.rs/vesti/ekonomija/drzava-subvencionise-hestil-krseci-pravila-evropske-unije/.

Wedel, Janine. 2001. "Clans, Cliques, and Captured States: Rethinking Transition in Central and Eastern Europe and the Former Soviet Union." WIDER Discussion Paper, No. 2001/58. https://www.econstor.eu/bitstream/10419/52751/1/333456785.pdf.